

Kerr-McGee Oil & Gas Onshore LP 1999 Broadway, Suite 3700 Denver, CO 80205

September 19, 2007

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Uintah County, Utah

Re: Directional Drilling R649-3-11

NBU 922-18J3S

T9S R22E

Section 18: NWSE

NWSE 1453' FSL, 2564' FEL (surface)

NWSE 1888' FSL, 2052' FEL (bottom hole)

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18J3S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating
 the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to
 utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore and the W/2, W/2NE/4 and SE/4 of Section 18 (federal leases USA UTU-0359, USA-UTU 0359-A and USA-UTU 0461).

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

James C. Colligan III

Landman

Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

BUREAU OF LAND MAN	NAGEMENT			UTU-0461	
APPLICATION FOR PERMIT TO	DRILL O	R REENTER		6. If Indian, Allotte TRIBAL SURFA	
la. Type of Work: X DRILL RE	ENTER				greement, Name and No.
				UNIT #8910089	00A
b. Type of Well: Oil Well Gas Well Other		Single Zone	Multiple Zone	8. Lease Name and NBU 922-18.	
2. Name of Operator KERR MCGEE OIL AND GAS ONSHORE LP				9. API Well No.	047-39842
3A. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078	(435) 781		ode)	10. Field and Pool, o	or Exploratory TES
4. Location of Well (Report location clearly and in accordance with At surface NW/SE 1453'FSL, 2564'FEL	any State req	uirements.*)		11. Sec., T., R., M.,	or Blk, and Survey or Area
At proposed prod. Zone NW/SE 1888'FSL, 2052'FEL				SEC. 18, T9S, F	₹22E
14. Distance in miles and direction from nearest town or post office* 16.6 +/- MILES FROM OURAY, UTAH				12. County or Parisl UINTAH	h 13. State UTAH
15. Distance from proposed* location to nearest property or lease line, ft. 1442'	16. No. of A	Acres in lease	17. Spacing Unit de	edicated to this well	
(Also to nearest drig. unit line, if any)	601.96		40.00		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. REFER TO TOPO C	19. Propose 9818'	ed Depth	20. BLM/BIA Bond RLB0005239	l No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.). 4861'GL	22. Approx UPON A	imate date work wi	ll start*	23. Estimated durati	
	24. <i>A</i>	Attachments			
The following, completed in accordance with the requirements of Ons	hore Oil and	Gas Order No. 1, sh	nall be attached to this	form:	
1. Well plat certified by a registered surveyor.		4. Bond to co	ver the operations un	less covered by an exis	ting bond on file (see
2. A Drilling Plan.		Item 20 abo		•	- ,
3. A Surface Use Plan (if the location is on National Forest System La	ands, the	5. Operator ce	rtification.		
SUPO shall be filed with the appropriate Forest Service Office.		6. Such other	site specific information	on and/or plans as may	be required by the
	·	authorized o			
25. Signature		me (Printed/Typed) EILA UPCHE			Date 11/16/2007
title		LILA OI CIIL	<u> </u>		11/10/2007
SENIOR LAND ADMINISPECIALIST					
Approved by Signature	i Nai	me (Printed/Typed) BRADLEY			Date 12-03-03
Title	Offi	ENVIRONMENT	AL MANAGER		
Application approval does not warrant or certify that the applicant hol	ds legal or eq	uitable title to those	e rights in the subject l	ease which would entit	le the applicant to conduct
ODCIATIONS INCICUI.					

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

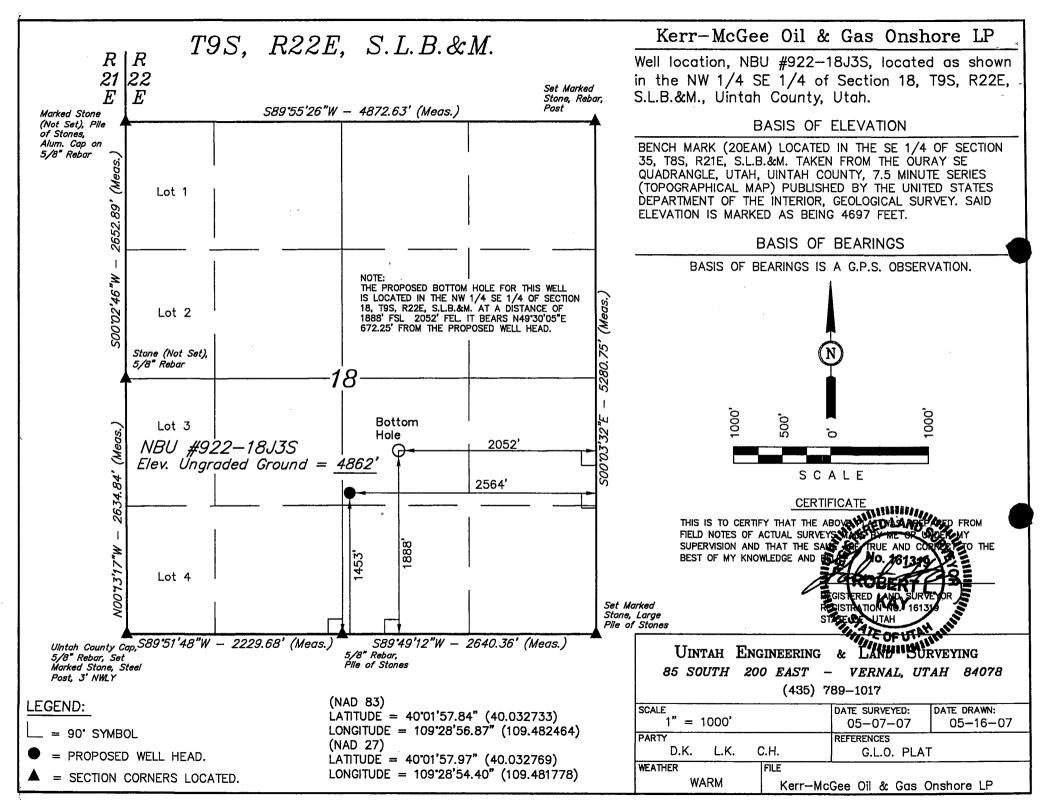
Sur f 629542 X 44322854 40,032742 -109.481742 Bril 429 495 X 44324204 40.033 934 -109.479924

Federal Approval of this Action is Necessary

RECEIVED

NOV 2 0 2007

DIV. OF OIL, GAS & MINING



NBU 922-18J3S NW/SE Sec. 18, T9S, R22E UINTAH COUNTY, UTAH UTU-0461

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>		<u>Depth</u>
Uinta Green River		0- Surface 1719'
Top of Birds Nest Water	2006	
Mahogany		2361'
Wasatch		4956'
Mesaverde		7663'
MVU2		8614'
MVL1		9108'
TVD		9730'
TD (MD)		9818'

2. <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations</u>:

Substance	<u>Formation</u>		<u>Depth</u>
	Green River		1719'
	Top of Birds Nest Water	2006'	
	Mahogany		2361'
Gas	Wasatch		4956'
Gas	Mesaverde		7663'
Gas	MVU2		8614'
Gas	MVL1		9108'
Water	N/A		
Other Minerals	N/A		

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP.

5. <u>Drilling Fluids Program</u>:

Please see the Natural Buttes Unit SOP.

6. <u>Evaluation Program</u>:

Please see the Natural Buttes Unit SOP.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 9818' TD, approximately equals 6087 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3927 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

9. <u>Variances:</u>

Please see Natural Buttes Unit SOP.

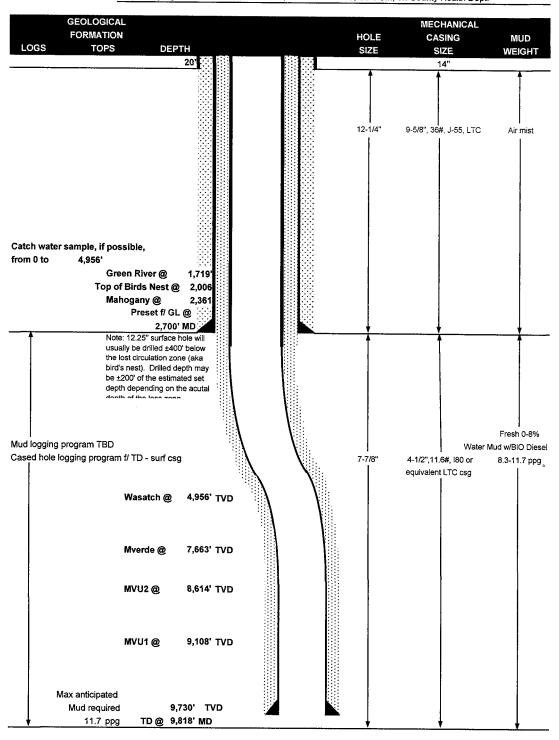
10. Other Information:

Please see Natural Buttes Unit SOP.



KERR-McGEE OIL & GAS ONSHORE LP <u>DRILLING PROGRAM</u>

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE November 16, 2007 NBU 922-18J3S WELL NAME TD 9,818' MD 9,730' TVD FIELD Natural Buttes COUNTY Uintah STATE Utah **ELEVATION** 4,861' GL KB 4,876' SURFACE LOCATION NW/SE SEC. 18, T9S, R22E 1453'FSL, 2564'FEL 40.032733 Longitude: 109.482464 Latitude: BTM HOLE LOCATION NW/SE SEC. 18, T9S, R22E 1888'FSL, 2052'FEL OBJECTIVE ZONE(S) Wasatch/Mesaverde ADDITIONAL INFO Regulatory Agencies: TRIBAL SURFACE, BLM MINERALS, UDOGM, Tri-County Health Dept.





KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

CASING PROGRAM

,								DESIGN FACTORS			
	SIZE	IN	TER\	/AL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION	
CONDUCTOR	14"		0-40	•							
				ĺ				3520	2020	453000	
SURFACE	9-5/8"	0	to	2700	36.00	J-55	LTC	0.92	1.60	5.93	
								7780	6350	201000	
PRODUCTION	4-1/2"	0	to	9818	11.60	I-80	LTC	2.04	1.06	2.02	

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

0.0 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP

3813 psi

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				35 T S
TOP	OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + .25 pps flocele]			
TOP	OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to	surface, o	ption 2 will	be utilized	
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite	360	35%	12.60	1.81
			+.25 pps Flocele + 3% salt BWOW				
	TAIL,	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
			+ .25 pps flocele	1	1 17	* * * * * * * * * * * * * * * * * * * *	A
TC	P OUT CMT	as required	Premium cmt + 2% CaCl	as req.	i	15.60	1.18
PRODUCTION	LEAD	7,158'	Premium Lite II + 3% KCI + 0.25 pps	780	60%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel		11111	ne nake a l	
			+ 0.5% extender			,	
			la travella de la companya de la co			trans	
	TAIL	2,660'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	750	60%	14.30	1.31

^{*}Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

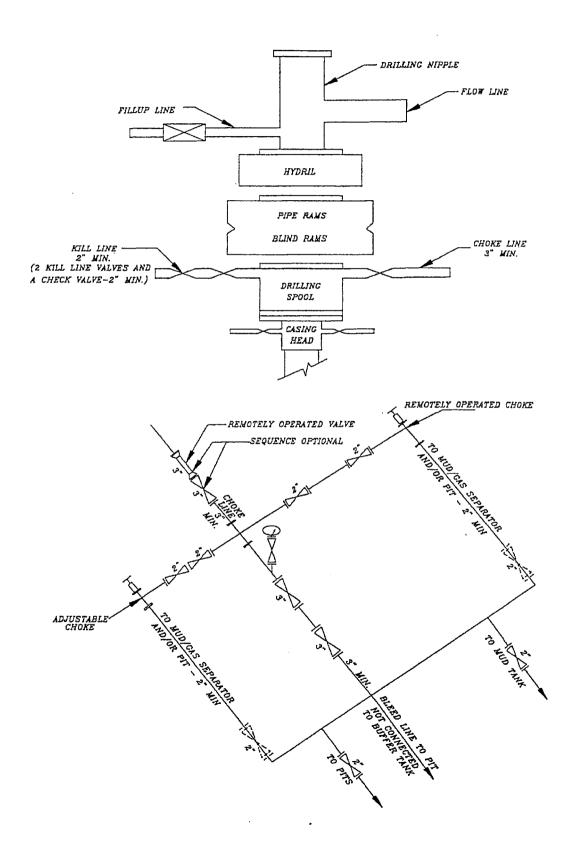
Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PV1 System to	or mud monitoring, If no PVT is available, visu	al monitoring will be utilized.	
DRILLING ENGINEER:		DATE:	
	Brad Laney		
DRILLING SUPERINTENDENT:		DATE:	
	Randy Bayne		_

5M BOP STACK and CHOKE MANIFOLD SYSTEM





Drilling Services

Proposal



ANADARKO - KERR McGEE

NBU 922-18J3S

UINTAH COUNTY, UTAH

WELL FILE: PLAN 2

DATE: OCTOBER 4, 2007

Weatherford International, Ltd.

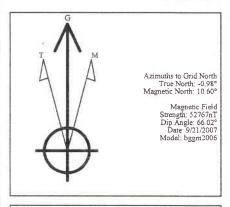
15710 John F. Kennedy Blvd Houston, Texas 77032 USA +1.281.260.1300 Main +1.281.260.4730 Fax www.weatherford.com





ANADARKO KERR MCGEE OIL & GAS NBU 922-18J3S UINTAH COUNTY, UTAH





				S	ECTION DE	TAILS				
Sec	MD	Inc	Azi	TVD	+N/-S	÷E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	48.59	0.00	0.00	0.00	0.00	0_00	0.00	
2	300.00	0.00	48.59	300.00	0.00	0.00	0.00	48.59	0.00	
3	600,00	3.00	48.59	599.86	5.19	5.89	1.00	48.59	7.85	
4	660,00	3.00	48.59	659.78	7.27	8.24	0.00	0.00	10.99	
5	1260.00	0.00	48.59	1259.51	17.66	20.02	0.50	180.00	26.70	
6	2800.49	0.00	48.59	2800.00	17.66	20.02	0.00	228.59	26.70	
7	3552.49	18.80	48.59	3538.58	98.53	111-73	2.50	0.00	148.97	
8	4538.98	18.80	48.59	4472.44	308.81	350.16	0.00	0.00	466 88	
9	5792,32	0.00	48 59	5703.40	443.60	503.00	1.50	180.00	670.66	
10	0919.01	0.00	10 50	9730.00	443.60	503.00	0.00	0.00	570.66	PRHI

				WELL DETAILS	,		
Name	+N/-S	÷E/-W	Northing	Easting	Latitude	Longitude	Slot
18J3S	0.00	0.00	14541582,00	2065419.60	40°01'57_799N	109°28′54,316W	N/A

		CASING	G DETAILS	
No.	TVD	MD	Name	Size
1	2700.00	2700.49	9 5/8"	9 62

FORMATION TOP DETAILS No. TVDPath MDPath

4956.00 7663.00 5040.06 WASATCH 7751.91 MESAVERDE

-375

-750 -375

0

375

750

West(-)/East(+) [750ft/in]

1125

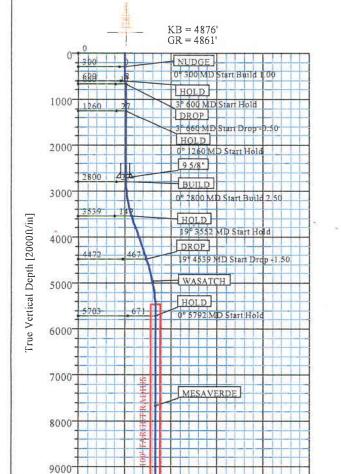
FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Geodetic System: Universal Transverse Mercator (USfeet) Ellipsoid: NAD27 (Clarke 1866) Zone: UTM Zone 12, North 114W to 108W Magnetic Model: bggm2006

LEGEND

System Datum: Mean Sea Level Local North: Grid North



PBHL 9819 MD TD

Vertical Section at 48.59° [2000ft/in]

2000

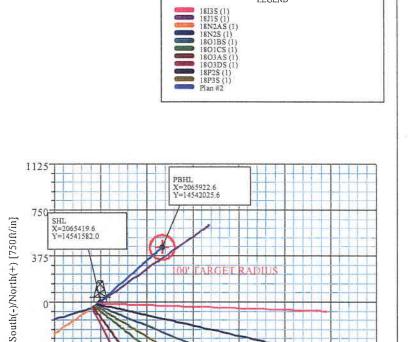
3000

4000

1000

10000 -1000

0



Plan: Plan #2 (18J3S/1) Created By: R. JOYNER Date: 10/4/2007

1500

1875

2250





Anadarko-Kerr-McGee Company:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) Field:

Site: Well:

18J3S

NBU 922-18J3S PAD IJNOP

Wellpath:

Date: 10/4/2007

Co-ordinate(NE) Reference:

Survey Calculation Method:

Time: 10:21:45

10/4/2007

Site: NBU 922-18J3S PAD IJNOP, Grid Nort

Vertical (TVD) Reference: SITE 4876.0 Section (VS) Reference:

Well (0.00N,0.00E,48.59Azi) Minimum Curvature

Db: Sybase

Plan: Plan #2

Yes Principal:

Date Composed:

Version:

Tied-to:

From Surface

Field:

Site:

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Map System: Universal Transverse Mercator (USfeet)

Geo Datum: NAD27 (Clarke 1866)

Sys Datum: Mean Sea Level

Map Zone:

UTM Zone 12, North 114W to 108W

Coordinate System: Geomagnetic Model: Site Centre bggm2006

NBU 922-18J3S PAD IJNOP

1453 FSL, 2564 FEL - SEC18 T9S R22E

Site Position: From:

Northing: 14541582.00 ft 2065419.60 ft

Latitude: Longitude: North Reference:

40 57.799 N 109 54.316 W

Grid

Position Uncertainty: Ground Level:

Well Position:

Wellpath:

0.00 ft 4861.00 ft

Grid Convergence: Slot Name:

Drilled From:

0.98 deg

Well:

18J3S

+N/-S +E/-W

SITE

Northing: 14541582.00 ft 0.00 ft 0.00 ft Easting:

Latitude: 2065419.60 ft Longitude: 40 1 57.799 N 28 54.316 W

Surface

Position Uncertainty:

Current Datum:

Magnetic Data:

Field Strength:

Vertical Section:

0.00 ft

52767 nT

9/21/2007

Depth From (TVD)

ft

0.00

Height 4876.00 ft

+N/-S

ft

0.00

Tie-on Depth: Above System Datum: Declination: Mag Dip Angle:

0.00 ft Mean Sea Level 11.57 deg 66.02 deg

+E/-W Direction ft deg 0.00 48,59

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	÷N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	48.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	48.59	300.00	0.00	0.00	0.00	0.00	0.00	48.59	
600.00	3.00	48.59	599.86	5.19	5.89	1.00	1.00	0.00	48.59	
660.00	3.00	48.59	659.78	7.27	8.24	0.00	0.00	0.00	0.00	
1260.00	0.00	48.59	1259.51	17.66	20.02	0.50	-0.50	0.00	180.00	
2800.49	0.00	48.59	2800.00	17.66	20.02	0.00	0.00	0.00	228.59	
3552.49	18.80	48.59	3538.58	98.53	111.73	2.50	2.50	0.00	0.00	
4538.98	18.80	48.59	4472.44	308.81	350.16	0.00	0.00	0.00	0.00	
5792.32	0.00	48.59	5703.40	443.60	503.00	1.50	-1.50	0.00	180.00	
9818.91	0.00	48.59	9730.00	443.60	503.00	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
300.00	0.00	48.59	300.00	0.00	0.00	0.00	0.00	14541582.00	2065419.60	NUDGE
400.00	1.00	48.59	399.99	0.58	0.65	0.87	1.00	14541582.58	2065420.25	
500.00	2.00	48.59	499.96	2.31	2.62	3.49	1.00	14541584.31	2065422.22	
600.00	3.00	48.59	599.86	5.19	5.89	7.85	1.00	14541587.19	2065425.49	HOLD
660.00	3.00	48.59	659.78	7.27	8.24	10.99	0.00	14541589.27	2065427.84	DROP
700.00	2.80	48.59	699.73	8.61	9.76	13.02	0.50	14541590.61	2065429.36	
800.00	2.30	48.59	799.63	11.55	13.10	17.47	0.50	14541593.55	2065432.70	
900.00	1.80	48.59	899.57	13.92	15.78	21.04	0.50	14541595.92	2065435.38	
1000.00	1.30	48.59	999.53	15.71	17.81	23.75	0.50	14541597.71	2065437.41	
1100.00	0.80	48.59	1099.51	16.92	19.18	25.58	0.50	14541598.92	2065438.78	
1200.00	0.30	48.59	1199.51	17.55	19.90	26.54	0.50	14541599.55	2065439.50	
1260.00	0.00	48.59	1259.51	17.66	20.02	26.70	0.50	14541599.66	2065439.62	HOLD





Company: Anadarko-Kerr-McGee

Field: UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

Site: NBU 922-18J3S PAD IJNOP

Well: 18J3S

Wellpath: 1

Date: 10/4/2007 Co-ordinate(NE) Reference:

Time: 10:21:45 Site: NBU 922-18J3S PAD IJNOP, Grid Nort

Vertical (TVD) Reference: SITE 4876.0 Section (VS) Reference:

Well (0.00N,0.00E,48.59Azi)

Survey Calculation Method: Minimum Curvature Db: Sybase

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Commen
1300.00	0.00	48.59	1299.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1400.00 1500.00	0.00	48.59	1399.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1500.00	0.00	48.59	1499.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1600.00	0.00	48.59	1599.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1700.00	0.00	48.59	1699.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1800.00	0.00	48.59	1799.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
1900.00	0.00	48.59	1899.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2000.00	0.00	48.59	1999.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2100.00	0.00	48.59	2000 54	47.00	20.00	00.70	0.00	4.45.44.500.00	0005400.00	
			2099.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2200.00	0.00	48.59	2199.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2300.00	0.00	48.59	2299.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2400.00	0.00	48.59	2399.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2500.00	0.00	48.59	2499.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2600.00	0.00	48.59	2599.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2700.00	0.00	48.59	2699.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	
2700.49	0.00	48.59	2700.00	17.66	20.02	26.70	0.00	14541599.66	2065439.62	9 5/8"
2800.00	0.00	48.59	2799.51	17.66	20.02	26.70	0.00	14541599.66	2065439.62	J 5/6
2800.49	0.00	48.59	2800.00	17.66	20.02	26.70	0.00	14541599.66	2065439.62	BUILD
2900.00	2.49	48.59	2899.48	19.09	21.64	28.86	2.50	14541601.09	2065441.24	
3000.00	4.99	48.59	2999.25	23.40	26.53	35.37	2.50	14541605.40	2065446.13	
3100.00	7.49	48.59	3098.65	30.58	34.68	46.24	2.50	14541612.58	2065454.28	
3200.00	9.99	48.59	3197.49	40.63	46.07	61.43	2.50	14541622.63	2065465.67	
3300.00	12.49	48.59	3295.56	53.52	60.69	80.92	2.50	14541635.52	2065480.29	
3400.00	14.99	48.59	3392.69	69.23	78.50	104.66	2.50	14541651 00	2065408 40	
3500.00	17.49	48.59	3488.70	87.72	99.47			14541651.23	2065498.10	
3552.49						132.62	2.50	14541669.72	2065519.07	
	18.80	48.59	3538.58	98.53	111.73	148.97	2.50	14541680.53	2065531.33	HOLD
3600.00	18.80	48.59	3583.55	108.66	123.21	164.28	0.00	14541690.66	2065542.81	
3700.00	18.80	48.59	3678.22	129.97	147.38	196.50	0.00	14541711.97	2065566.98	
3800.00	18.80	48.59	3772.88	151.29	171.55	228.73	0.00	14541733.29	2065591.15	
3900.00	18.80	48.59	3867.55	172.61	195.72	260.96	0.00	14541754.61	2065615.32	
4000.00	18.80	48.59	3962.21	193.92	219.89	293.18	0.00	14541775.92	2065639,49	
4100.00	18.80	48.59	4056.88.	215.24	244.06	325.41	0.00	14541797.24	2065663.66	
4200.00	18.80	48.59	4151.54	236.55	268.23	357.64	0.00	14541818.55	2065687,83	
4000.00	40.00	40.50	101001	0== 0=	000.40					
4300.00 4400.00	18.80	48.59	4246.21	257.87	292.40	389.86	0.00	14541839.87	2065712.00	
	18.80	48.59	4340.87	279.18	316.57	422.09	0.00	14541861.18	2065736.17	
4500.00	18.80	48.59	4435.53	300.50	340.74	454.32	0.00	14541882.50	2065760.34	5505
4538.95 4538.98	18.80	48.59	4472.41	308.80	350.15	466.87	0.00	14541890.80	2065769.75	DROP
4000.98	18.80	48.59	4472.44	308.81	350.16	466.88	0.00	14541890.81	2065769.76	
4600.00	17.88	48.59	4530.35	321.51	364.56	486.08	1.50	14541903.51	2065784.16	
4700.00	16.38	48.59	4625.91	341.00	386.66	515.54	1.50	14541923.00	2065806.26	
4800.00	14.88	48.59	4722.21	358.82	406.87	542.49	1.50	14541940.82	2065826.47	
4900.00	13.38	48.59	4819.18	374.97	425.19	566.91	1.50	14541956.97	2065844.79	
5000.00	11.88	48.59	4916.76	389.44	441.59	588.78	1.50	14541971.44	2065861.19	
5040.06	11.28	48.59	4956.00	394.76	447.62	596.83	1.50	14541976.76	2065867.22	WASATCH
5100.00	10.38	48.59	5014.87	402.21	456.07	608.10	1.50	14541984.21	2065875.67	MODICII
5200.00	8.88	48.59	5113.46	413.28	468.63	624.83	1.50	14541995.28	2065888.23	
5300.00	7.38	48.59	5212.45	422.64	479.24	638.98				
5400.00	5.88	48.59	5212.45 5311.78	430.29	479.24 487.90	650.53	1.50 1.50	14542004.64 14542012.29	2065898.84 2065907.50	
5500.00	4.38	48.59	5411.37	436.21	494.62	659.48	1.50	14542018.21	2065914.22	
5600.00	2.88	48.59	5511.17	440.40	499.37	665.82	1.50	14542022.40	2065918.97	
5700.00	1.38	48.59	5611.10	442.86	502.16	669.55	1.50	14542024.86	2065921.76	
5792.32	0.00	48.59	5703.40	443.60	503.00	670.66	1.50	14542025.60	2065922.60	HOLD
5800.00	0.00	48.59	5711.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	





Company: Anadarko-Kerr-McGee

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-18J3S PAD IJNOP

Site: 18J3S

Well: Wellpath: 1

Co-ordinate(NE) Reference:

Date: 10/4/2007

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Time: 10:21:45

Site: NBU 922-18J3S PAD IJNOP, Grid Nort

SITE 4876.0

Well (0.00N,0.00E,48.59Azi)

Minimum Curvature

Db: Sybase

Survey										
MD	Incl	Azim	TVD	N/S	E/W	VS	DLS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	ft	deg/100ft		ft	
5000.00		40.50								
5900.00	0.00	48.59	5811.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6000.00	0.00	48.59	5911.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6100.00	0.00	48.59	6011.09	443.60	503.00	670.66	0.00	14542025,60	2065922.60	
6200.00	0.00	48.59	6111.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6300.00	0.00	48.59	6211.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6400.00	0.00	48.59	6311.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6500.00	0.00	48.59	6411.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6600.00	0.00	48.59	6511.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6700.00	0.00	48.59	6611.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
6800.00	0.00	48.59	6711.09	443.60	503.00	670.66	0.00	14542025.60		
0000.00	0.00	40.00	0711.09	443.00	505.00	070.00	0.00	14042025.60	2065922.60	
6900.00	0.00	48.59	6811.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7000.00	0.00	48.59	6911.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7100.00	0.00	48.59	7011.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7200.00	0.00	48.59	7111.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7300.00	0.00	48.59	7211.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7400.00	0.00	48.59	7311.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7500.00	0.00	48.59	7411.09	443.60	503.00	670.66	0.00			
7600.00	0.00	48.59	7511.09	443.60				14542025.60	2065922.60	
7700.00					503.00	670.66	0.00	14542025.60	2065922.60	
	0.00	48.59	7611.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7751.91	0.00	48.59	7663.00	443.60	503.00	670.66	0.00	14542025.60	2065922.60	MESAVERDE
7800.00	0.00	48.59	7711.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
7900.00	0.00	48.59	7811.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8000.00	0.00	48.59	7911.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8100.00	0.00	48.59	8011.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8200.00	0.00	48.59	8111.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8300.00	0.00	48.59	8211.09	443.60	503.00	670.66	0.00	14540005.00	0005000 00	
8400.00	0.00	48.59	8311.09					14542025.60	2065922.60	
8500.00	0.00	48.59		443.60	503.00	670.66	0.00	14542025.60	2065922.60	
			8411.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8600.00	0.00	48.59	8511.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8700.00	0.00	48.59	8611.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
8800.00	0.00	48.59	8711.09	443.60	503.00	670:66	0.00	14542025.60	2065922.60	
8900.00	0.00	48.59	8811.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9000.00	0.00	48.59	8911.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9100.00	0.00	48.59	9011.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9200.00	0.00	48.59	9111.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
0200.00	0.00	40.50	0044.00	440.00	505.55	000 0-	0.00			
9300.00	0.00	48.59	9211.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9400.00	0.00	48.59	9311.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9500.00	0.00	48.59	9411.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9600.00	0.00	48.59	9511.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9700.00	0.00	48.59	9611.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9800.00	0.00	48.59	9711.09	443.60	503.00	670.66	0.00	14542025.60	2065922.60	
9818.91	0.00	48.59	9730.00	443.60	503.00	670.66	0.00	14542025.60	2065922.60	PBHL
,			0.00.00	0.00	555.05	5,0.00	0.00	. 7072020.00	2000922.00	I DI IL

Targets

Name	Descripti Dip.	ion Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft		- Lati Min		< Longitude> Deg Min Sec
PBHL -Circle (Rad -Plan hit targ			9730.00	443.60	503.00	14542025.602	2065922.60	40	2	2.098 N	109 28 47.752 W





Company: Anadarko-Kerr-McGee

Field:

Site:

Well: 18J3S Wellpath: 1

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) NBU 922-18J3S PAD IJNOP

Co-ordinate(NE) Reference: Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

Date: 10/4/2007

Time: 10:21:45

Site: NBU 922-18J3S PAD IJNOP, Grid Nort

SITE 4876.0

Well (0.00N,0.00E,48.59Azi)

Minimum Curvature

Db: Sybase

Casing I	Poir	ıt:
----------	------	-----

MD TVD Diameter Hole Size Name ft in in
00.49 2700.00 9.62 12.25 9 5/8"

Annotation

	MID ft	TVD ft	
-			
	300.00	300.00	NUDGE
/	600.00	599.86	HOLD
	660.00	659.78	DROP
1	260.00	1259.51	HOLD
2	2800.49	2800.00	BUILD
3	3552.49	3538.58	HOLD
4	1538.95	4472.41	DROP
5	5792.32	5703.41	HOLD
9	818.91	9730.00	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5040.06	4956.00	WASATCH		0.00	0.00
7751.91	7663.00	MESAVERDE		0.00	0.00



Weatherford Drilling Services

GeoDec v4.1.130

Market Control of the									
Report Date:	September 24,	2007							
Job Number:	-								
Customer:	ANADARKO-KERR McGEE								
Well Name:	NBU 922-18J3S								
API Number:									
Rig Name: Location:	TINITED II COLINES	7 (1007) (1							
Block:	UNITAH COUNTY	i, UTAH							
Engineer:	R JOYNER								
Engineer.	I JOINER								
Universal Transv	erse Mercator	Geodetic Latitude /	Longitude						
System: Zone 12	N (114 W to 108 W)	System: Latitude / L	ongitude						
Projection: Trans	verse Mercator/Gaus	s Kruger Projection: Geodetic	Latitude and Longitude						
Datum: NAD 192	7 (NADCON CONUS	s) Datum: NAD 1927 (NADCON CONUS)						
Ellipsoid: Clarke	1866	Ellipsoid: Clarke 186	Ellipsoid: Clarke 1866						
North/South 145	41582.000 USFT	Latitude 40 1 57.79	89226 DMS						
East/West 20654	119.600 USFT	Longitude -109 28	54.3162031 DMS						
Grid Convergenc	e: .97676693°	J							
Total Correction:	+10.5909°								
Geodetic Location	n WGS84	Elevation = 1482.0 Meter	`S						
Latitude =	40.03272° N	40° 1 min 57.799 se	ec						
Longitude = 1	.09.48175° W	109° 28 min 54.316 se	ec						
Magnetic Declina	tion = +11.568	0° [True North Offse	et]						
Local Gravity =	.9995	g							
Local Field Streng	~	3	20994 nT						
Dip =	66.0200	° Mag Vector Y =	4297 nT						
Model File:	bggm2006	Mag Vector Z =	48176 nT						
Spud Date:	Sep 24, 2	007 Mag Vector H =	21430 nT						
Signed:		Date:							

NBU 922-18J3S NW/SE SEC. 18, T9S, R22E UINTAH COUNTY, UTAH UTU-0461

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

Approximately 0.25 +/- miles of access road is proposed. Please refer to the attached Topo Map B.

3. <u>Location of Existing Wells Within a 1-Mile Radius:</u>

Please refer to Topo Map C.

4. <u>Location of Existing & Proposed Facilities:</u>

Please see the Natural Buttes Unit SOP.

Approximately 1633' +/- of 8" steel pipeline is proposed from the location to an existing pipeline. Refer to the attached Topo Map D.

Approximately 672' +/- of 4" steel pipeline needs to be re-route around the location. Refer to the attached Topo Map D

Approximately 636'+/- of 4" steel pipeline needs to be re-route around the location. Refer to the attached Topo Map D.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

5. <u>Location and Type of Water Supply:</u>

Please see the Natural Buttes SOP.

6. Source of Construction Materials:

Please see the Natural Buttes SOP.

7. <u>Methods of Handling Waste Materials</u>:

Please see the Natural Buttes SOP.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (Request is in lieu of filing Form 3160-5, after initial production).

8. Ancillary Facilities:

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Culverts will be installed where needed.

A run off diversion for drainage will be constructed where needed.

The reserve pit will be lined. When the reserve pit is closed the pit liner will be buried below plow depth.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

11. Surface Ownership:

The well pad and access road are located on lands owned by:

Ute Indian Tribe P.O. Box 70 Fort Duchesne, Utah 84026 (435) 722-5141

12. Other Information:

A Class III Archaeological Survey Report has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within boundaries of the unit.

13. <u>Lessee's or Operator's Representative & Certification:</u>

Sheila Ucphego Senior Land Admin Specialist Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7024 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bold #WYB000291 and State of Utah Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Sheila Upchego

11/2/2007

Date

Kerr-McGee Oil & Gas Onshore LP NBU #922-18J3S, J1S, 13S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS SECTION 18, T9S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH: PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST: TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH: TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.25 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTHEAST; FOLLOW ROAD FLAGS IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.25 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 47.6 MILES.

Kerr-McGee Oil & Gas Onshore LP

NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS

LOCATED IN UINTAH COUNTY, UTAH **SECTION 18, T9S, R22E, S.L.B.&M.**

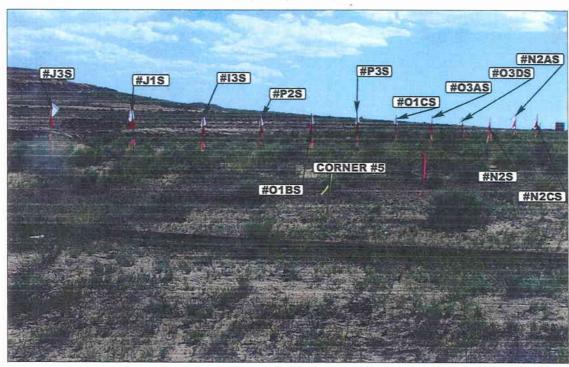


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY



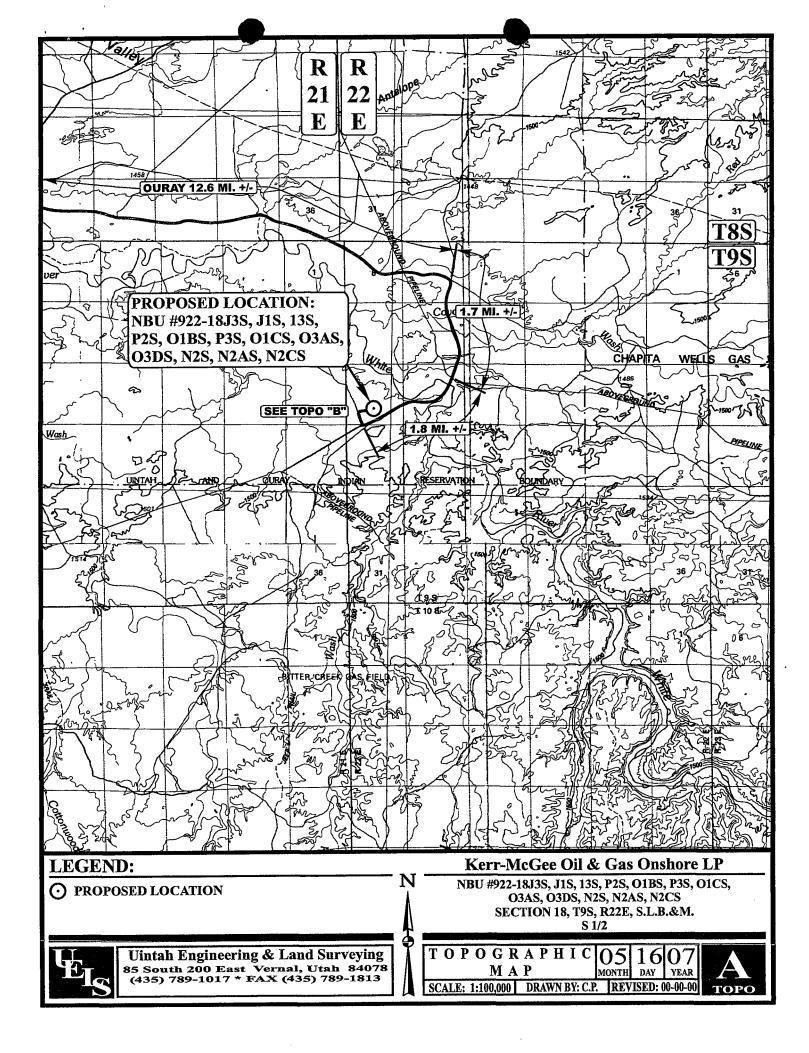
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

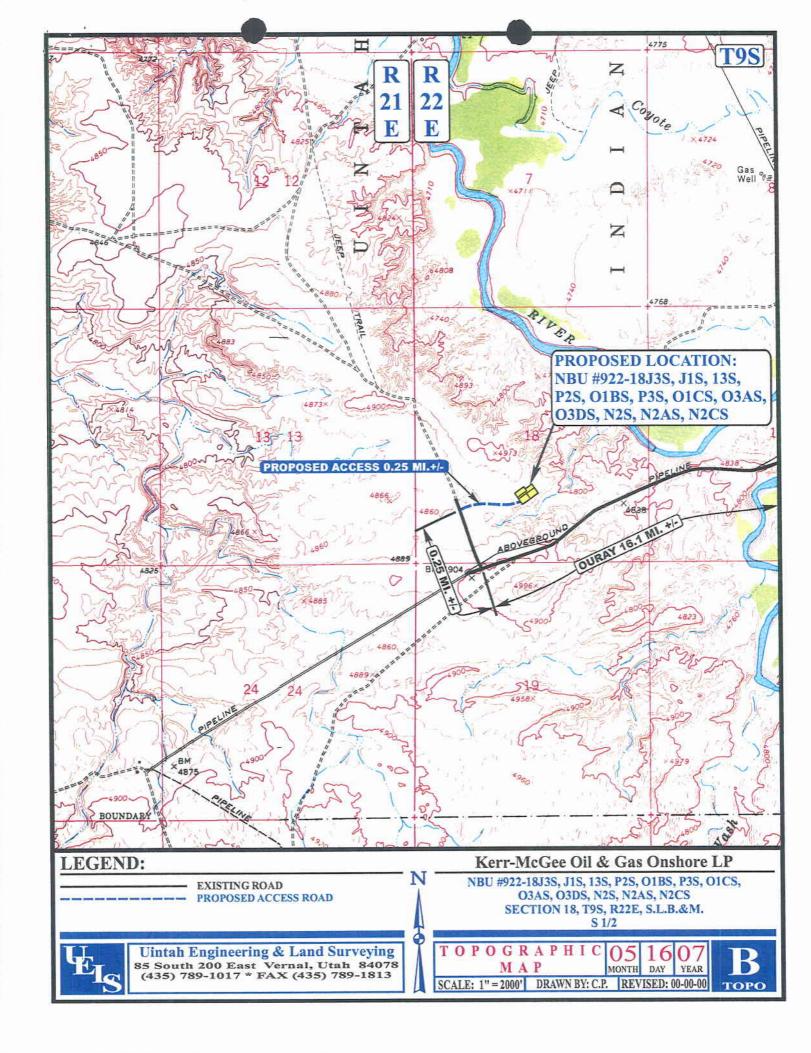
LOCATION PHOTOS

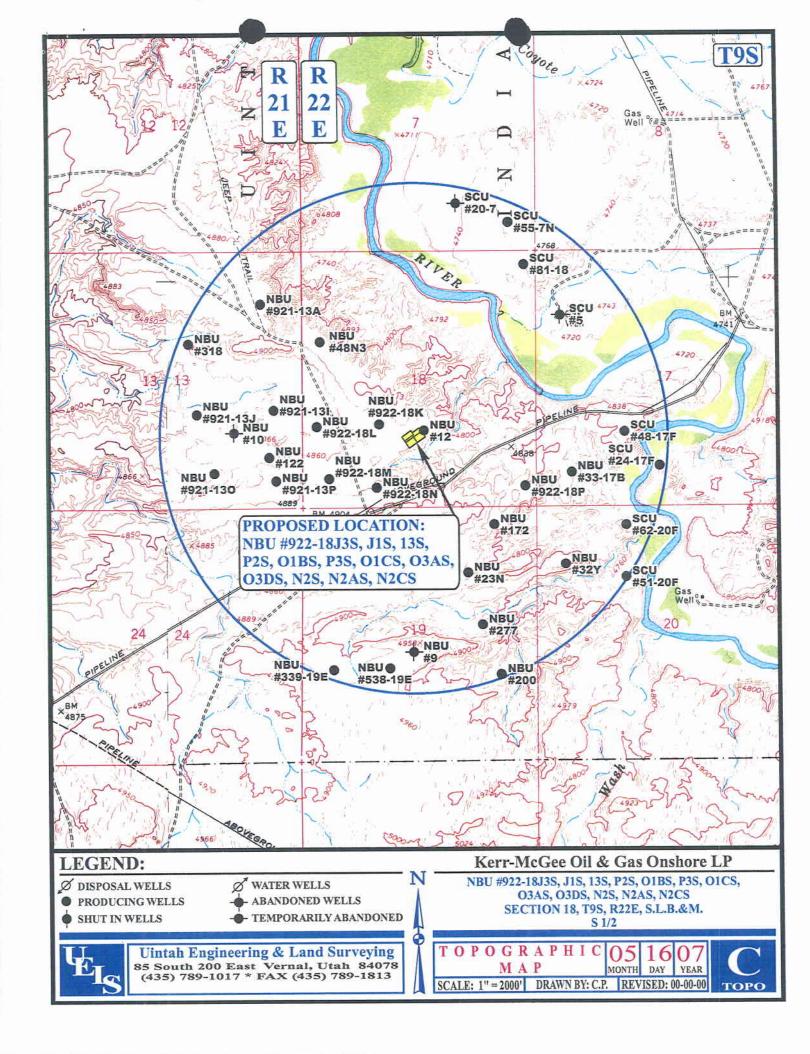
РНОТО

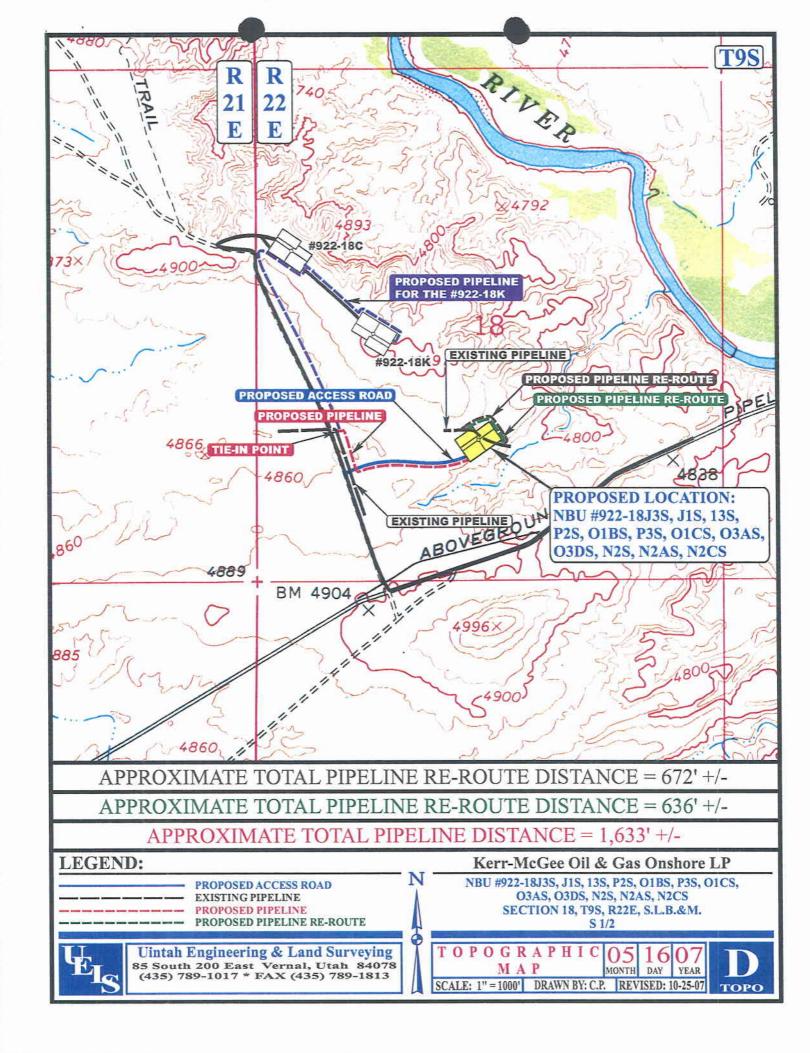
TAKEN BY: L.K. | DRAWN BY: C.P.

REVISED: 00-00-00









Kerr-McGee Oil & Gas Onshore LP
NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS, O3AS, O3DS, N2S, N2AS, N2CS
PIPELINE ALIGNMENT

LOCATED IN UINTAH COUNTY, UTAH **SECTION 18, T9S, R22E, S.L.B.&M.**

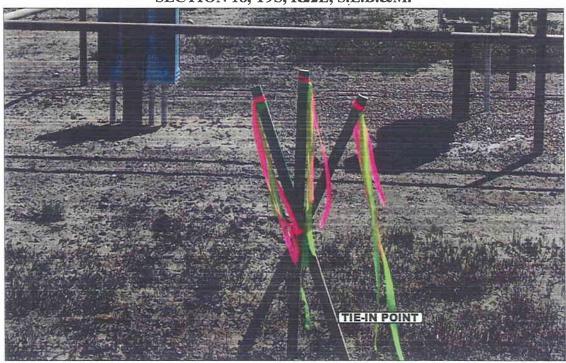


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: EASTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: EASTERLY



Uintah Engineering & Land Surveying S South 200 East Vernal, Utah 84078 435-789-1017 Vernal, Utah 84078 uels@uelsinc.com

PIPELINE PHOTOS

TAKEN BY: L.K. DRAWN BY: C.P.

РНОТО

SCALE: 1" = 50DATE: 05-16-07

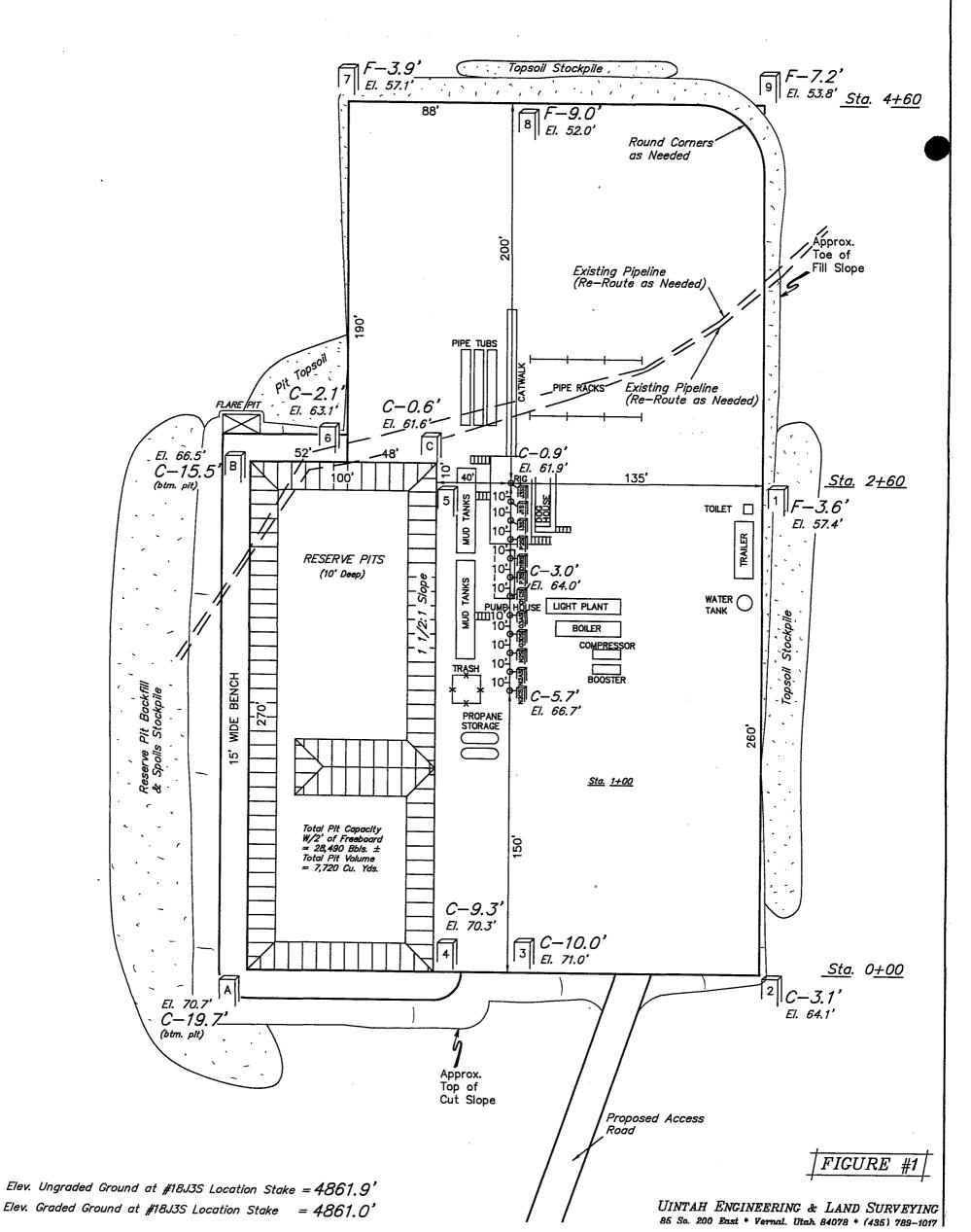
LOCATION LAYOUT FOR NBU #922-18J3S, J1S, I3S, P2S, O1BS, P3S, O1CS 03AS, 03DS, N2S, N2AS, N2CS SECTION 18, T9S, R22E, S.L.B.&M.

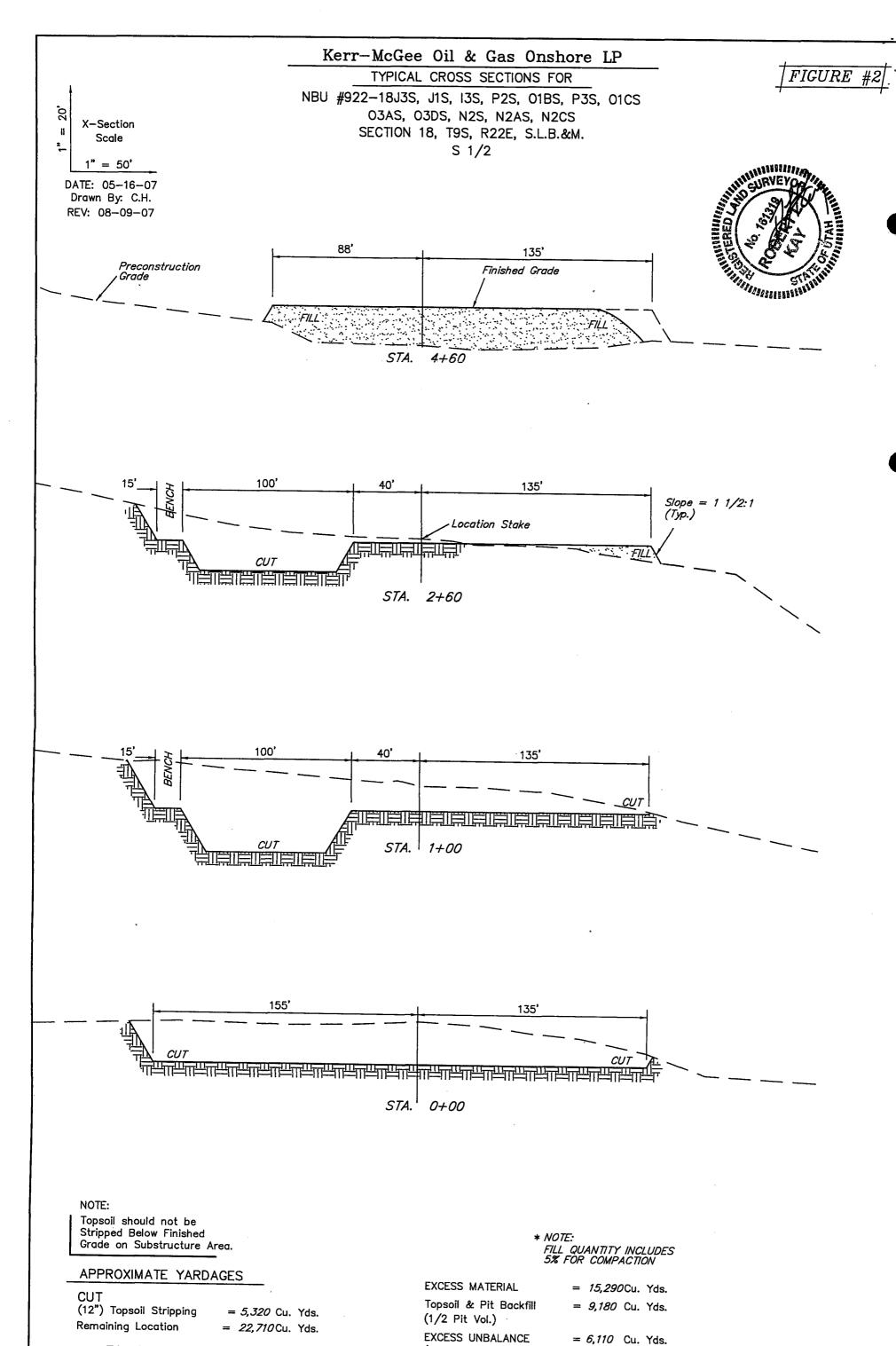
Kerr-McGee Oil & Gas Onshore LP

S 1/2



Drawn By: C.H. REV: 08-09-07





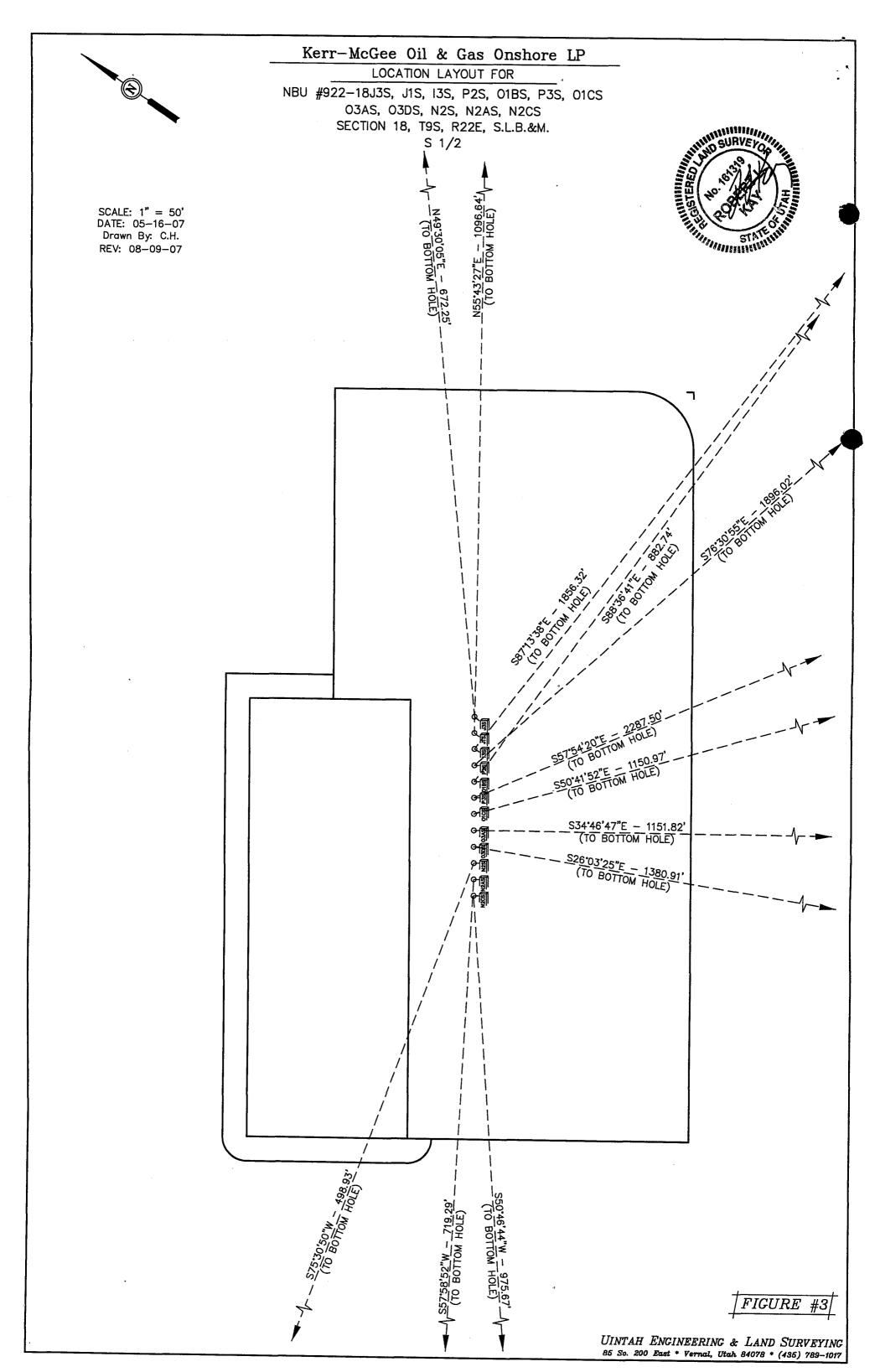
(After Interim Rehabilitation)

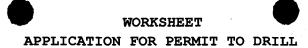
TOTAL CUT

FILL

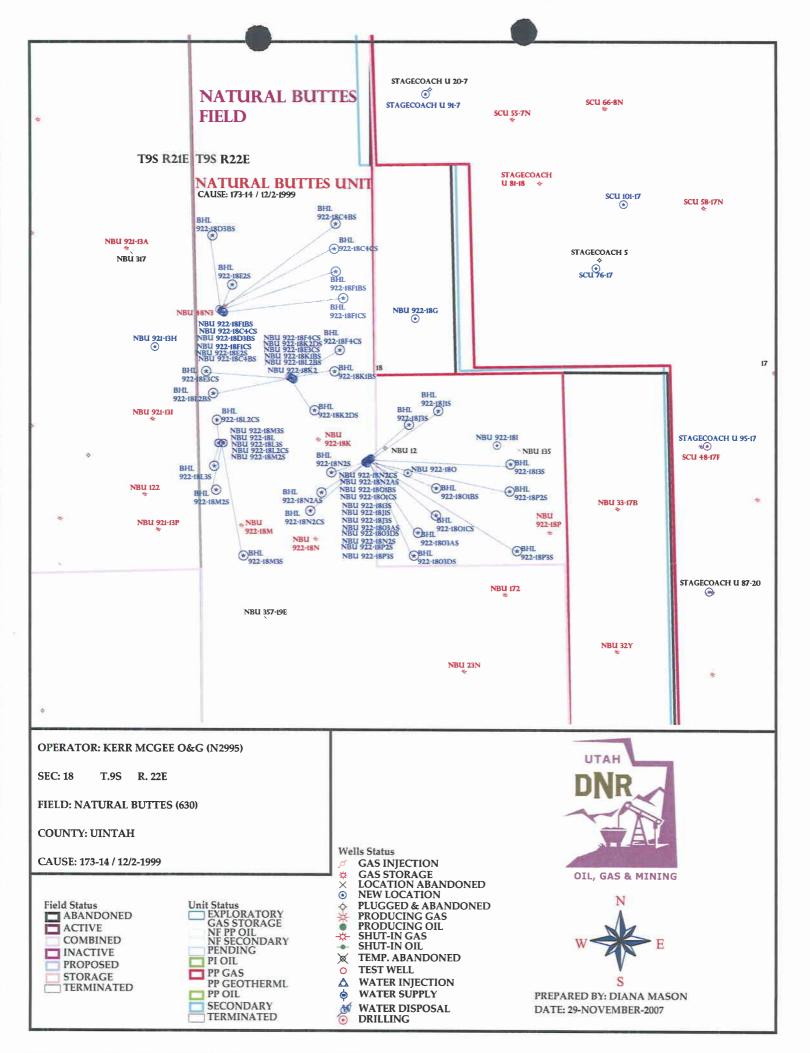
28,030CU.YDS.

12,740 CU.YDS.





APD RECEIVED: 11/20/2007	API NO. ASSIG	GNED: 43-047	7-39842
WELL NAME: NBU 922-18J3S OPERATOR: KERR-MCGEE OIL & GAS (N2995) CONTACT: SHEILA UPCHEGO	PHONE NUMBER:	435-781-702	4
PROPOSED LOCATION:	INSPECT LOCATN	BY: /	/
NWSE 18 090S 220E SURFACE: 1453 FSL 2564 FEL	Tech Review	Initials	Date
BOTTOM: 1888 FSL 2052 FEL	Engineering		
COUNTY: UINTAH	Geology		-
LATITUDE: 40.03274 LONGITUDE: -109.4817 UTM SURF EASTINGS: 629542 NORTHINGS: 44322	85 Surface		
FIELD NAME: NATURAL BUTTES (630 LEASE TYPE: 1 - Federal LEASE NUMBER: UTU-0461 SURFACE OWNER: 2 - Indian	PROPOSED FORMA COALBED METHAN		VD
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. RLB0005239) Potash (Y/N) Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) RDCC Review (Y/N) (Date:) Fee Surf Agreement (Y/N) Intent to Commingle (Y/N)	LOCATION AND SITING: R649-2-3. Unit: NATURAL BUTTES R649-3-2. Gener Siting: 460 From Q R649-3-3. Except Drilling Unit Board Cause No: Eff Date: Siting: 400 From Q R649-3-11. Direction	tr/Qtr & 920' B otion 173-14 11-2-19 ubdy 5Un	997 Comm.Tract
STIPULATIONS: Sop Separt flee Stipulations: 1. Eden Opport 2-Oil Ship			



United States Department of the Interior

BURFAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

November 30, 2007

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject: 2007 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API#

WELL NAME

LOCATION

BHL Sec 18 T09S R22E 1994 FSL 0262 FWL

(Proposed PZ Wasatch/MesaVerde)

43-047-39821 NBU 922-18F4CS Sec 18 T09S R22E 2529 FSL 1248 FWL BHL Sec 18 T09S R22E 2406 FNL 1895 FWL 43-047-39822 NBU 922-18K2DS Sec 18 T09S R22E 2508 FSL 1282 FWL BHL Sec 18 T09S R22E 2099 FSL 1548 FWL 43-047-39823 NBU 922-18E3CS Sec 18 T09S R22E 2540 FSL 1231 FWL BHL Sec 18 T09S R22E 2632 FSL 0136 FWL 43-047-39824 NBU 922-18K1BS Sec 18 T09S R22E 2524 FSL 1256 FWL BHL Sec 18 T09S R22E 2602 FSL 1821 FWL 43-047-39825 NBU 922-18M3S Sec 18 T09S R22E 1688 FSL 0334 FWL BHL Sec 18 T09S R22E 0203 FSL 0571 FWL 43-047-39826 NBU 922-18L3S Sec 18 T09S R22E 1689 FSL 0274 FWL BHL Sec 18 T09S R22E 1390 FSL 0214 FWL 43-047-39827 NBU 922-18L2CS Sec 18 T09S R22E 1687 FSL 0344 FWL

43-047-39828	NBU			R22E 1			
43-047-39829	NBU			R22E 1			FEL FEL
43-047-39830	NBU			R22E (FEL FEL
43-047-39831	NBU			R22E 1			FEL FWL
43-047-39832	NBU	Sec Sec		R22E R22E			
43-047-39833	NBU	Sec Sec		R22E R22E			
43-047-39834	NBU			R22E R22E		 	
43-047-39835	NBU			R22E R22E			
43-047-39836	NBU			R22E R22E	1875 0745	0362 1878	
43-047-39837	NBU			R22E R22E	1870 1529	0354 0503	
43-047-39838	NBU			R22E R22E	1892 1724	 0387 1956	
43-047-39839	NBU			R22E R22E		 2228 1617	
43-047-39840	NBU			R22E R22E			
43-047-39841	NBU			R22E R22E			
43-047-39842	NBU			R22E R22E			
43-047-39843	NBU			R22E R22E			

43-047-39844 NBU 922-18I3S Sec 18 T09S R022E 1442 FSL 2580 FEL BHL Sec 18 T09S R022E 1346 FSL 0726 FEL

43-047-39845 NBU 922-18C4CS Sec 18 T09S R22E 1881 FNL 0370 FWL BHL Sec 18 T09S R22E 1075 FNL 1849 FWL

43-047-39846 NBU 922-18F1BS Sec 18 T09S R22E 1886 FNL 0379 FWL BHL Sec 18 T09S R22E 1375 FNL 1868 FWL

43-047-39847 NBU 922-18N2CS Sec 18 T09S R22E 1390 FSL 2220 FWL BHL Sec 18 T09S R22E 0775 FSL 1462 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

MCoulthard:mc:11-30-07



JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT
Lieutenant Governor



MICHAEL R. STYLER Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

December 3, 2007

Kerr McKee Oil and Gas Onshore LP 1368 South 1200 East Vernal, UT 84078

Re:

NBU 922-18J3S Well, Surface Location 1453' FSL, 2564' FEL, NW SE, Sec. 18, T. 9 South, R. 22 East, Bottom Location 1888' FSL, 2052' FEL, NW SE, Sec. 18,

T. 9 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39842.

Sincerely,

Gil Hunt

Associate Director

Kifth I

pab Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal Office



Operator:	Kerr McKee Oil and Gas Onshore LP					
Well Name & Number	NBU 92					
API Number:	43-047-					
Lease:	UTU-0461					
Surface Location: NW SE Bottom Location: NW SE	Sec. 18 Sec. 18	T. 9 South T. 9 South	R. 22 EastR. 22 East			

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
- 6 In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

Form 3160-3 (August 1999)

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0136

	Expires	November	30,	200
T 0000	Comin 1 N	I.a.		

UTU-0461

APPLICATION FOR PERMIT TO	6. If Indian, Allottee or Tribe Name TRIBAL SURFACE							
la. Type of Work: X DRILL REI	ENTER			7. If Unit or CA Agreement, Name and No. UNIT #891008900A				
b. Type of Well: Oil Well Gas Well Other	Single Zone	• 🛛 м	ultiple Zone	8. Lease Name and NBU 922-18J				
2. Name of Operator KERR MCGEE OIL AND GAS ONSHORE LP		9 API Well No. 37842						
3A. Address 1368 SOUTH 1200 EAST VERNAL, UT 84078	3b. Phone No. (include (435) 781-7024	area code,)	10. Field and Pool, or Exploratory NATURAL BUTTES				
4. Location of Well (Report location clearly and in accordance with At surface NW/SE 1453'FSL, 2564'FEL At proposed prod. Zone NW/SE 1888'FSL, 2052'FEL	any State requirements.*	9		11. Sec., T., R., M., SEC. 18, T9S, R	or Blk, and Survey or Area			
14. Distance in miles and direction from nearest town or post office* 16.6 +/- MILES FROM OURAY, UTAH	12. County or Parish UINTAH	13. State UTAH						
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in leas601.96		 Spacing Unit dec 0.00 	licated to this well				
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. REFER TO TOPO C	19. Proposed Depth 9818'	· · · · · · · · · · · · · · · · · · ·		No. on file				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4861'GL	22. Approximate date work will start* UPON APPROVAL		tart*	23. Estimated duration TO BE DETERMINED				
24. Attachments								
The following, completed in accordance with the requirements of Ons	hore Oil and Gas Order N	No. 1, shall	be attached to this f	form:				
1. Well plat certified by a registered surveyor.	4. Bor	4. Bond to cover the operations unless covered by an existing bond on file (see						
2. A Drilling Plan.	Iten	Item 20 above).						
3. A Surface Use Plan (if the location is on National Forest System La	ands, the 5. Ope	5. Operator certification.						
SUPO shall be filed with the appropriate Forest Service Office.	i i	 Such other site specific information and/or plans as may be required by the authorized office. 						
25. Signature Line Collection	Name (Printed SHEILA UF		0		Date 11/16/2007			
SENIOR LAND ADMIN SPECIALIST								

Assistant Field Manager Application applic operations thereon.

Office

Name (Printed/Typed)

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Approved by (Signature

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED

RECEIVED MAR 2 8 2008

DIV. OF OIL, GAS & MINING



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE



(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Kerr-McGee Oil & Gas Onshore, LP Location: NWSE, Sec. 18, T9S, R22E

Well No: NBU 922-18J3S Lease No: UTU-0461

API No: 43-047-39842 Agreement: Natural Buttes Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:		(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	•	(435) 781-4476	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7482
NRS/Enviro Scientist:		(435) 781-3400	(435) 828-3544
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
•		Fav. (435) 781-3420	

Fax: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction
(Notify NRS/Enviro Scientist)
Location Completion
(Notify NRS/Enviro Scientist)
Spud Notice
(Notify Petroleum Engineer)
Casing String & Cementing
(Notify Supervisory Petroleum Technician)
BOP & Related Equipment Tests
(Notify Supervisory Petroleum Technician)
First Production Notice

(Notify Petroleum Engineer)

- Forty-Eight (48) hours prior to construction of location and access roads.
- Prior to moving on the drilling rig.
- Twenty-Four (24) hours prior to spudding the well.
- Twenty-Four (24) hours prior to running casing and cementing all casing strings.
- Twenty-Four (24) hours prior to initiating pressure tests.
- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well Name: NBU 922-18J3S

3/20/2008

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

General Surface COAs

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer AO. A report will be prepared by a BLM permitted paleontologist and submitted to the AO at the completion of surface disturbing activities.

Specific Surface COAs

Additional Stipulations:

- Re-route 24 Inch pipeline on location. 2)
- 8-Inch pipeline.

General Conditions of Approval

- A <u>30'</u> foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which
 are Monday through Thursday. The Company understands that they may be responsible
 for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROWs.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APDs and ROW applications the Companies will notify the
 Ute Tribe and BIA in writing and will receive written authorization of any such change
 with appropriate authorization.

Page 3 of 7 Well Name: NBU 922-18J3S 3/20/2008

 The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.

- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified shall cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

Page 4 of 7 Well Name: NBU 922-18J3S 3/20/2008

DOWNHOLE CONDITIONS OF APPROVAL

SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL

- Production casing cement shall be brought up and into the surface casing. Production
 casing minimum cement top is 1800 ft. The minimum cement top is approximately 800 ft
 above the surface casing shoe.
 - o Cmnt Top (TOC) standard will place cmnt behind casing across formation lost circulation zone, Birds Nest Zone.
 - COA specification fulfills operators performance standard stated in APD (where operators toc is calc'd with an excess to reach surface).
- Covering air/gas drilling operations, requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- A Gamma Ray well Log shall be run from the well Total Depth to the surface.
 - A copy of the Gamma Ray well Log shall be submitted to the BLM Vernal Field Office.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
 daily drilling report. Components shall be operated and tested as required by Onshore Oil &
 Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
 performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
 reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.

Page 5 of 7 Well Name: NBU 922-18J3S 3/20/2008

Cement baskets shall not be run on surface casing.

The operator must report all shows of water or water-bearing sands to the BLM. If flowing
water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to
the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program
 as approved. Safe drilling and operating practices must be observed. Any changes in
 operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well Name: NBU 922-18J3S 3/20/2008

OPERATING REQUIREMENT REMINDERS:

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located;
 otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include

Page 7 of 7 Well Name: NBU 922-18J3S 3/20/2008

deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or
 workover equipment shall be removed from a well to be placed in a suspended status
 without prior approval of the BLM Vernal Field Office. If operations are to be suspended for
 more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and
 notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

Form 3160- 5 (August, 2007)

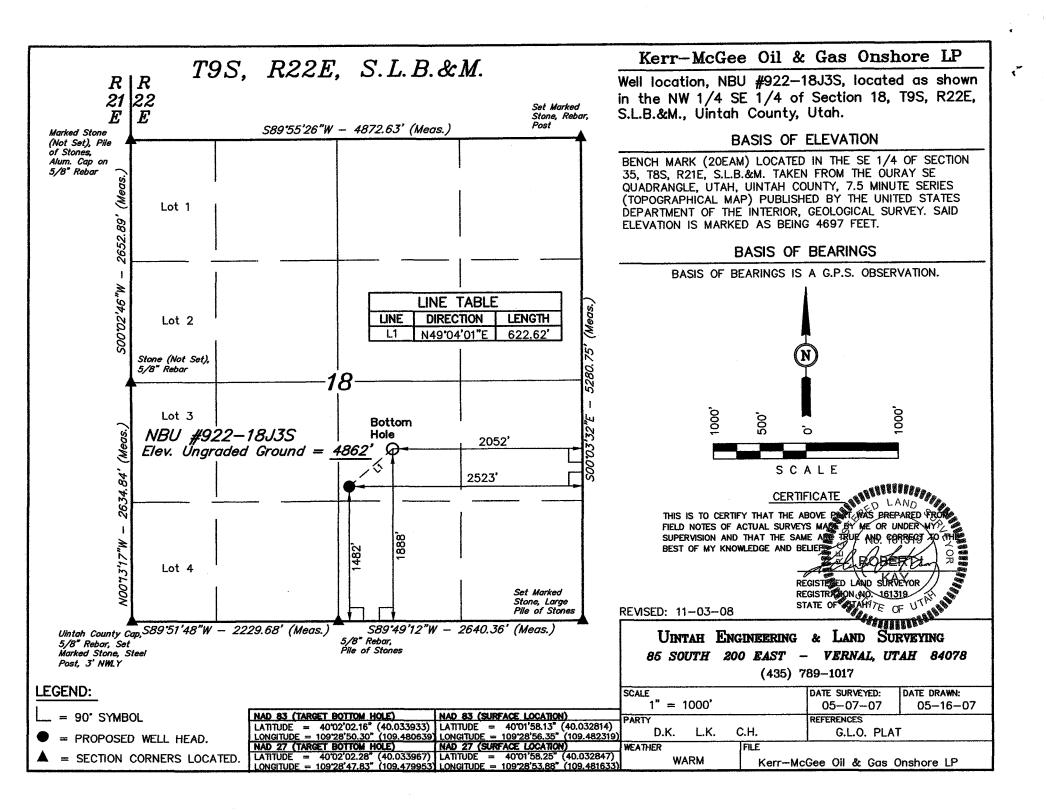
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

OMB No. 1004-0137 Expires: July 31, 2010

						5.	Lease	Seria

				5. Lease Serial No	·
	/ELLS	UTU-0461			
	enter an oposals.	6. If Indian, Allott	ee, or Tribe Name Ute Tribe		
	N TRIPLICATE - Other Ir			7. If Unit or CA. A	Agreement Name and/or No.
1. Type of Well				-[U	TU-63047A
Oil Well X Gas Well	Other			8. Well Name and	No.
2. Name of Operator				NBU	922-18J3S
Kerr-McGee Oil & Gas Onsl	nore, LP			9. API Well No.	
3a. Address	00 00047 0770	3b. Phone No. (inch			3-047-39842
P.O. Box 173779, Denv 4. Location of Well (Footage, Sec., T.,		720.9	29.6226		, or Exploratory Area atural Buttes
NW SE Sec. 18	T 98 R 22E			11. County or Pari	
1482 FSL 2523					Uintah
	RIATE BOX(S) TO INDICA	TE NATURE OF	NOTICE, REPO	RT, OR OTHER	
TYPE OF SUBMISSION			PE OF ACTION		······································
TILLOF SODIMOSION	<u> </u>	7			· · · · · · · · · · · · · · · · · · ·
Notice of Intent	Acidize	Deepen	Production (Start/Resume)	Water Shut-off
	Altering Casing	Fracture Treat	Reclamation		Well Integrity
X Subsequent Report	Casing Repair	New Construction	Recomplete		X Other
	Change Plans	Plug and abandon	Temporarily	Ahondon	Surface Location
	Change rians	_			
Final Abandonment Notice	Convert to Injection	Plug back	Water Dispo	sal	
Kerr-McGee Oil & 0 surface location ha location has not be	Gas Onshore, LP, reveloped to Note to	espectfully no NWSE 1482'	FSIA 807576	he center st ԱՄԵՐԿԻԺ he vision of	akes for the bottomhole COPY SENT TO OPER
			Oil Gas a	and Mining	Date: 12 14 20
62	9554X		On, Cas		
			. —		Initials: <u>K5</u>
	322944	1	Date: 12-	01-08	41
deral Approva- tion is Necessary	40.032814	_	\mathcal{L}	() () ()	VV
	-109.481602	<u>'</u>	3y: <u>1</u>	XX VIX	100
14. I hereby certify that the foregoing is Name (Printed/ Typed)	true and correct.	ı		<i>?</i> ,	
• • • • • • • • • • • • • • • • • • • •		Title		Regulatory An	alvet
Kevin McIntyre				Regulatory An	aiysi
Signature /		Date		11/12/08	
	THIS SPACE FOR	FEDERAL OR S	TATE OFFICE		
				T	
Approved by	ng paginang kan pagangan paginang pagang pagang paginan malikan magani man pagah dan dan dan dan dan dan dan da	Title		Date	9
Conditions of approval, if any are attache certify that the applicant holds legal or eq					
which would entitle the applicant to cond	uct operations thereon.				* BECEIVE
Title 18 U.S.C. Section 1001 AND Title 4 States any false, fictitiousor fraudulent sta	43 U.S.C. Section 1212, make it a cri- tements or representations as to any r	me for any person know natter within its jurisdic	ingly and willfully to nation.	nake any department o	r agency of the Office
(Instructions on page 2)					' NOV 1 / 20:





Kerr-McGee Oil & Gas Onshore LP 1999 Broadway, Suite 3700 Denver, CO 80205

November 24, 2008

Mrs. Diana Mason Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11

NBU 922-18J3S <u>T9S-R22E</u> Section 18: NWSE

Surface: 1482' FSL, 2523' FEL

Bottom Hole: 1888' FSL, 2052' FEL

Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18J3S is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire
 directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE-OIL & GAS ONSHORE LP

Jason K. Rayburn Landman

> RECEIVED NOV 2 6 2008

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Cor	npany: <u>K</u> F	ERR-McGEE O	L & G	AS ONSHO	RE, L.P.	
Well Name	•	NBU 922-18	8J3S			
Api No:	43-047-39	842	L	ease Type:_	FEDERAL	
Section 18	Township_	09S Range_	22E	County	UINTAH	
Drilling Cor	ntractor	PETE MART	IN DR	LG RI	G# <u>BUCKET</u>	
SPUDDE	D:					
	Date	12/13/2008				
	Time	10:30 AM				
	How	DRY				
Drilling wi	II Commen	ce:				
Reported by		LEW W	<u>ELDON</u>	N		
Telephone #		(435) 82	8-7035			
Date	12/15/08	Signed	CHD			-



DEPARTMENT OF THE INTERIOR

UNITED STATES BUREAU OF LAND MANAGEMENT

FORM APPRO	VED
OMB No. 1004-	-0137
77 T 1 .01	0016

Expires: July 31, 2010	
. Lease Serial No. JTU-0461	

				UTU-0461			
SUNDRY N Do not use this t abandoned well.	6. If Indian, Allottee or Tribe Name TRIBAL SURFACE						
SUBMI	T IN TRIPLICATE - Othe	r instructions on page 2.	##	1	ment, Name and/or No.		
1. Type of Well				UNIT #891008900A			
Oil Well	7ell Other		······	8. Well Name and No. NBU 922-18J3S			
2. Name of Operator KERR McGEE OIL & GAS ONSHO	RE LP			9. API Well No. 4304739842			
3a. Address 1368 SOUTH 1200 EAST VERNAL, UTAH 840	78	3b. Phone No. (include area co	ode)	10. Field and Pool or E NATURAL BUTTES	•		
4. Location of Well (Footage, Sec., T., SURFACE HOLE: NW/SE SEC. 18, T98, R22E BOTTOM HOLE: NW/SE SEC. 18, T98, R22E	R.,M., or Survey Description 1453'FSL, 2564'FEL 1888'FSL, 2052'FEL	1)		11. Country or Parish, UINTAH COUNTY, I			
12. CHEC	K THE APPROPRIATE BO	OX(ES) TO INDICATE NATUR	E OF NOTIO	CE, REPORT OR OTHE	ER DATA		
TYPE OF SUBMISSION		TY	PE OF ACT	TION			
Notice of Intent ✓ Subsequent Report	Acidize Alter Casing Casing Repair	Deepen Fracture Treat New Construction	Recl	uction (Start/Resume) amation mplete	Water Shut-Off Well Integrity ✓ Other WELL SPUD		
▼ Subsequent Report	Change Plans	Plug and Abandon	Temp	porarily Abandon			
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Wate	or Disposal			
13. Describe Proposed or Completed Op the proposal is to deepen directions Attach the Bond under which the w following completion of the involv testing has been completed. Final determined that the site is ready for	ally or recomplete horizontal work will be performed or pred ed operations. If the operati Abandonment Notices must	lly, give subsurface locations and ovide the Bond No. on file with I ion results in a multiple completi	l measured ar BLM/BIA. R on or recomp	nd true vertical depths of lequired subsequent rep- letion in a new interval,	f all pertinent markers and zones. orts must be filed within 30 days a Form 3160-4 must be filed once		
MIRU PETE MARTIN BUCKET RIG CMT W/28 SX READY MIX.	. DRILLED 20" CONDUC	CTOR HOLE TO 40'. RAN 14	" 36.7# SCH	EDULE 10 PIPE.	•		
SPUD WELL LOCATION ON 12/13/	2008 AT 1030 HRS.						
					F RECEIVED		

DEC 18 2000

14. I hereby certify that the foregoing is true and correct.		DIV. OF OIL, GAS & MINING			
Name (Printed/Typed) SHEILA UPCHEGO Tit	YST				
Signature////////////////////////////////////	ate 12/15/2008				
THIS SPACE FOR FEDERA	L OR STATE OFFIC	E USE			
Approved by					
	Title	Date			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person	knowingly and willfully to m	ake to any department or agency of the United States any fal			

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

1368 SOUTH 1200 EAST

city VERNAL

zip 84078 state UT

Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739843	NBU 922-18J1S		NWSE	18	98,	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ity Assignment Iffective Date
B	99999	2900	1.	2/14/200	08	12	120/08

Comments:

WSMVD MIRU PETE MARTIN BUCKET RIG.

SPUD WELL LOCATION ON 12/14/2008 AT 2200 HRS.

BHL NWSE

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739842	NBU 922-18J3S		NWSE	18	98,	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	s	pud Da	te		ity Assignment ffective Date
B	99999 3900 12/14/2008 /3/30/0				1/30/08		
	J PETE MARTIN BUCKE					hamman new Arran Thomas	

SPUD WELL LOCATION ON 12/14/2008 AT 1030 HRS. BAL-NWSE

Well 3

Well	Well Name		Sec	Twp	Rng	County
NBU 922-18N2CS		NESW	18	98,	22E	UINTAH
Current Entity Number	New Entity Number	S	pud Dat	te		ity Assignment Iffective Date
99999	3900	1	2/13/200	08	12	1/30/08
	NBU 922-18N2CS Current Entity Number	NBU 922-18N2CS Current Entity New Entity Number Number	NBU 922-18N2CS NESW Current Entity New Entity S Number Number	NBU 922-18N2CS Current Entity Number New Entity Number Spud Date Number	NBU 922-18N2CS Current Entity Number New Entity Number Spud Date	NBU 922-18N2CS Current Entity Number New Entity Number New Entity Number Spud Date Entity Number

WSMUS MIRU PETE MARTIN BUCKET RIG.

SPUD WELL LOCATION ON 12/13/2008 AT 1200 HRS.

BHL= SESU

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED

SHEILA UPCHEGO

Name (Please Print)

Signature

SENIOR LAND SPECIALIST Title

12/15/2008

Date

(6/2000)

DEC 1 7 2008

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	FORM APPROVED
	OMB No. 1004-0137
	Expires: July 31, 2010
Lease Serial No.	

Lease Serial No
UTU-0461

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

	orm for proposals i Use Form 3160-3 (A				TRIBAL SURFACE	
SUBMI	T IN TRIPLICATE — Other	instructions o	n page 2.		_	ement, Name and/or No.
1. Type of Well					UNIT #891008900A	
Oil Well Gas W					8. Well Name and No NBU 922-18J3S	
2. Name of Operator KERR McGEE OIL & GAS ONSHOR	RELP	•			9. API Well No. 4304739842	
3a. Address 1368 SOUTH 1200 EAST VERNAL, UTAH 8407	78	3b. Phone No	. (include area co	de)	10. Field and Pool or	•
		435.781.702	4	·	NATURAL BUTTES	
4. Location of Well (Footage, Sec., T., SURFACE HOLE: NW/SE SEC. 18, T9S, R22E BOTTOM HOLE: NW/SE SEC. 18, T9S, R22E	K., M., OF SURVEY Description 1453'FSL, 2564'FEL 1888'FSL, 2052'FEL)			11. Country or Parish UINTAH COUNTY,	
12. CHEC	K THE APPROPRIATE BO	X(ES) TO IND	ICATE NATUR	E OF NOT	ICE, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TY	PE OF AC	CTION	
Notice of Intent	Acidize	Deep Deep	en	☐ Pro	oduction (Start/Resume)	Water Shut-Off
	Alter Casing	=	ture Treat	Re	clamation	Well Integrity
Subsequent Report	Casing Repair		Construction		complete	Other SET SURFACE
Final Abandonment Notice	Change Plans Convert to Injection		and Abandon Back	P*************************************	mporarily Abandon ater Disposal	CSG
MIRU PROPETRO AIR RIG ON 01/ LEAD CMT W/270 SX HIFILL CLAS GOOD RETURNS NO CMT TO SUI PREM CLASS G @15.8 PPG 1.15 Y G @15.8 PPG 1.15 YIELD, DOWN I WORT.	S G @11.0 PPG 3.82 YIE RFACE 600 PSI LIFT LAN /IELD. DOWN 1" PIPE NO	ELD. TAILED ID PLUG FLO D RETURNS 1	CMT W/200 SX ATS HELD. RA FO SURFACE V	PREM CI N 200' OF VOC. TOF	LASS G @15.8 PPG 1 - 1" PIPE. CMT W/100	.15 YIELD. SX
14. I hereby certify that the foregoing is tr Name (Printed/Typed)	ue and correct.					
SHEILA UPCHEGO		<i></i>	Title REGULA	ATORY A	NALYST	, where the second seco
Signature///////	Malle	410	Date 01/19/20	009		
	THIS SPACE	FOR FEDE	RAL OR ST	ATE OF	FICE USE	
Approved by			Title			Dete
Conditions of approval, if any, are attached that the applicant holds legal or equitable ti entitle the applicant to conduct operations t	tle to those rights in the subject		ertify			RECEIVED
Title 18 U.S.C. Section 1001 and Title 43 I fictitious or fraudulent statements or repres	J.S.C. Section 1212, make it a sentations as to any matter wit	crime for any p	erson knowingly a	nd willfully	to make to any departmen	nt or agerica of the United States any false,

			FORM 9		
	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES				
	DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461		
	RY NOTICES AND REPORTS ON	_	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE		
	sals to drill new wells, significantly deepen exis gged wells, or to drill horizontal laterals. Use A		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES		
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18J3S		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSI	HORE, L.P.		9. API NUMBER: 43047398420000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1482 FSL 2523 FEL		COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWSE Section: 18	P, RANGE, MERIDIAN: Township: 09.0S Range: 22.0E Meridian: S		STATE: UTAH		
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA		
TYPE OF SUBMISSION					
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
Approximate date work will start.	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	□ DEEPEN □	FRACTURE TREAT	☐ NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON		
	☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL		
✓ DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION		
7/14/2009	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:		
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pertiner	nt details including dates, depths, ve	olumes, etc.		
FINISHED DRILLIN 11.6# I-80 PRODUCT 2.50 YIELD. TAILE DROP PLUG & DISP THROUGH JOB LIFT MIN W/NO LOSS PLI HELD W/1.5 BBLS BA 5K. NIPPLE DOWN	IG FROM 2880' TO 9875' ON 07/1 ION CSG. LEAD CMT W/630 SX PD CMT W/1260 SX 50/50 POZ @: LACE W/152 BBLS H2O + ADDIT PRESSURE @2500 PSI BUMP PLU JG DOWN @1130 HRS. W/5 BBL ACK TO INVENTORY L/D LANDING BOP ROT HEAD SPACER SPOOLS S. RELEASED H&P 298 ON 07/14	12/2009. RAN 4 1/2" PREM LITE II @11.7 PPA 14.3 PPG 1.31 YIELD. L IVES GOOD RETURNOII IG W/3000 PSI HEAR S CMT TO PIT FLOATS G JT SET PACK OFF TO FMC DRILL ADAPTER /2009 AT 1600 HRS.	Accepted by the Utah Division of Gas and Mining		
Sheila Wopsock	435 781-7024	Regulatory Analyst			
SIGNATURE N/A		DATE 7/22/2009			

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461
	RY NOTICES AND REPORTS O		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen ex 1gged wells, or to drill horizontal laterals. Use		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18J3S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047398420000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1482 FSL 2523 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: NWSE Section: 18	IP, RANGE, MERIDIAN: Township: 09.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
THE SUBJECT WELL V	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE ✓ PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION MAS PLACED ON PRODUCTION TO THE ATTACHED CHRONOLO	ent details including dates, depths, v. ON 09/30/2009 AT 9:00 OGICAL WELL HISTORY. A U	
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst	
SIGNATURE N/A	, 20 323 0100	DATE 10/1/2009	

Operation Summary Report

UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0

 Well: NBU 922-18J3S (ORANGE)
 Spud Conductor: 12/13/2008
 Spud Date: 1/12/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18J PAD
 Rig Name No: PROPETRO/, H&P 298/298

Event: DRILLING Start Date: 1/12/2009 End Date: 7/14/2009

Active Datum: RKB @4,887.00ft (above Mean Sea Level)

Level)								
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/12/2009	12:00 - 0:00	12.00	DRLSUR	02		Р		MOVE IN AND RIG UP AIR RIG SPUD @ 1200 HR 1/12/09 DA AT REPORT TIME 840'
1/13/2009	0:00 - 12:00	12.00	DRLSUR	02		Р		RIG DRILLING AHEAD NO WATER 1360'
	12:00 - 0:00	12.00	DRLSUR	02		Р		RIG DRILLING AHEAD NO WATER 1890'
1/14/2009	0:00 - 6:00	6.00	DRLSUR	02		Р		DRILL TO 1950' WITH HAMMER PREPAIR FOR TRIP
	6:00 - 12:00	6.00	DRLSUR	06		Р		TRIP FOR TRICONE RIH AND SURVEY .75 DEG @ 1950'
	12:00 - 0:00	12.00	DRLSUR	02		Р		RIG DRILLING AHEAD CIRCULATING WITH PROPETRO CEMENT @ 10 BBL PER MIN. NO RETURNS TO PIT 2150'
1/15/2009	0:00 - 12:00	12.00	DRLSUR	02		Р		RIG DRILLING AHEAD CIRCULATING WITH PROPETRO CEMENT 10 BBL PER MIN. WITH 5 BBL RETURNS 2350' RUN SURVEY .5 DEG.
	12:00 - 0:00	12.00	DRLSUR	02		Р		RIG DRILLING AHEAD CIRCULATING WITH PROPETRO CEMENT 10 BBL PRE MIN. EITH + - 5 BBL RETURNS 2500'
1/16/2009	0:00 - 12:00	12.00	DRLSUR	02		P		RIG DRILLING AHEAD CIRCULATING WITH PROPETRO CEMENT AT 10 BBL PER MIN FULL RETURNS 2675'
	12:00 - 18:00	6.00	DRLSUR	02		Р		RIG DRILLED TO 2820' LOST 13,000 LB TWIST OFF COLLARS PREPAIR TO TOOH
	18:00 - 22:00	4.00	DRLSUR	06	G	Z		TRIP DP OUT OF HOLE LOST ALL OF THE 8" COLLARS
	22:00 - 0:00	2.00	DRLSUR	06		Z		RIH WITH FISHING TOOLS AT REPORT TIME
1/17/2009	0:00 - 1:00	1.00	DRLSUR	19	Α	Z		RETRIVE FISH AND PREPAIR TO LDDS AND FISH
	1:00 - 4:00	3.00	DRLSUR	06	G	Z		TRIP DP OUT OF HOLE LAY DOWN FISH
	4:00 - 7:00	3.00	DRLSUR	06		Р		TRIP IN HOLE W/ TRICONE
	7:00 - 11:00	4.00	DRLSUR	02		Р		RIG T/D @ 2880' CONDITION HOLE 1 HR RUN SURVEY .75 DEG.
	11:00 - 15:00	4.00	DRLSUR	06		Р		TRIP DP OUT OF HOLE
	15:00 - 19:30	4.50	DRLSUR	12		Р		RUN 2830' OF 9 5/8 CSG AND 200' OF 1" PIPE RIG DOWN AIR RIG
	19:30 - 20:30	1.00	DRLSUR	12		Р		CEMENT 1ST STAGW WITH 270 SKS LEAD @ 11# 3.82 23 GAL/SK AND 200 SKS TAIL @ 15.8# 1.15 5.0 GAL/SK GOOD RETURNS NO CEMENT TO SURFACE 600 PSI LIFT LAND PLUG FLOATS HELD
	20:30 - 21:00	0.50	DRLSUR	12		Р		1ST TOP JOB 100 SKS DOWN 1" PIPE NO RETURNS TO SURFACE WOC
	21:00 - 23:00	2.00	DRLSUR	12		Р		2ND TOP JOB 150 SKS DOWN BS GOOD CMT TO SURFACE AND STAYED AT SURFACE
	23:00 - 23:00	0.00	DRLSUR					NO VISIBLE LEAKS PIT 50% FULL WORT
7/2/2009	15:00 - 17:00	2.00	MIRU	01	С	Ρ		RIG DOWN / SKID RIG / RIG UP
	17:00 - 17:30	0.50	PRPSPD	14	Α	Р		NIPPLE UP B.O.P.E. & RELATED EQUIPMENT

10/1/2009

Operation Summary Report

Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Well: NBU 922-18J3S (ORANGE) Rig Name No: PROPETRO/, H&P 298/298 Site: NBU 922-18J PAD Project: UTAH-UINTAH End Date: 7/14/2009 Start Date: 1/12/2009 Event: DRILLING

Active Datum: _evel)	RKB @4,887.00ft (above Mean	Sea					,453.00/E/0/2,564.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	17:30 - 22:30	5.00	PRPSPD	15	A	P	X197	PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES, HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES - MAKE REPAIRS AS NEEDED / FUNCTION TEST CLOSING UNIT - PASSED
	22:30 - 23:00	0.50	PRPSPD	14	В	Р		INSTALL WEAR BUSHING / TEST PUMPS / LINES & TOP DRIVE TO 2500 PSI / VISUAL EQIPMENT INSPECTION
	23:00 - 0:00	1.00	MIRU	14	В	_		PICK UP .22 R.P.G. MOTOR & SET BEND TO 2.12 DEG / MAKE UP BIT / INSTALL & ORIENTATE M.W.D. TOOLS & SURFACE TEST / CHANGE OUT EMITTER SUB
7/3/2009	0:00 - 1:30 1:30 - 3:30	1.50	PRPSPD PRPSPD	06 02	A F	P P		T.I.H. W/ B.H.A. #1 / INSTALL ROTATING HEAD RUBBER / TAG CEMENT @ 2774' DRILL FLOAT TRAC F/ 2774' - T/ 2888'
		2.00						
	3:30 - 6:00	2.50	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 2888' - T/ 3050' = 162' @ 64.8 FPH / H2O + POLYMER / WOB 15/18 / RPM TOP DRV 25-30 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1250-1040 / TQ ON/OFF 4K/1K / PU/SO/ROT 106/95/100 / H2O + POLY / SLID 39' IN 55 MINUTES = 24% OF FOOTAGE & 45% OF HRS DRILLED (START KICK OFF @ 2967') / SCIENTIFIC DRILLING CONDUCTING RANGING OPERATIONS FOR COLLISION AVOIDANCE / 10' SURVEYS
	6:00 - 14:00	8.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 3050' - T/ 3378' = 328' @ 41 FPH / H2O + POLYMER / WOB 16/20 / RPM TOP DRV 35-45 / MTR 99 RPM / PUMP SPM 100 = 450GPM / SPP ON/OFF 1190-1060 / TQ ON/OFF 6K/3K / PU/SO/ROT 116/99/108 / H2O + POLY / SLIDE 71' IN 2.5 HRS = 22% OF FOOTAGE & 31% OF HRS DRILLED / SCIENTIFIC DRILLING CONDUCTING RANGING OPERATIONS FOR COLLISION AVOIDANCE / FULL 10' - 30' SURVEYS
	14:00 - 14:30	0.50	DRLPRO	07	Α	Р		SERVICE RIG & EQUIPMENT / INSPECT DRAG CHAIN / VISUAL INSPECTION ON B.O.P.E.
	14:30 - 0:00	9.50	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 3378' – T/ 3764' = 386' @ 40.63 FPH / H2O + POLYMER / WOB 18/20 / RPM TOP DRV 25-30 / MTR 100 RPM / PUMP SPM 101 = 454 GPM / SPP ON/OFF 1568-1220 / TQ ON/OFF 6K/2K / PU/SO/ROT 119/102/110 / H2O + POLY / SLID 133' IN 5.42 HRS = 34.4% OF FOOTAGE & 57% OF HRS DRILLED / SCIENTIFIC DRILLING CONDUCTING RANGING OPERATIONS FOR COLLISION AVOIDANCE / FULL 10' - 30' SURVEYS
7/4/2009	0:00 - 6:00	6.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 3764' – T/ 4008' = 244' @ 40.66 FPH / H2O + POLYMER / WOB 18/20 / RPM TOP DRV 25-28 / MTR 100 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1540-1220 / TQ ON/OFF 7K/2K / PU/SO/ROT 121/102/110 / H2O + POLY W/ WEIGHTED SWEEPS / SLIDE 92' IN 3.08 HRS = 38% OF FOOTAGE & 51.3% OF HRS DRILLED / SCIENTIFIC DRILLING CONDUCTING RANGING OPERATIONS FOR COLLISION AVOIDANCE /10' - 30' SURVEYS DEPENDING ON MAGNETIC INTERFERENCE

Operation Summary Report Spud Date: 1/12/2009 Spud Conductor: 12/13/2008 Well: NBU 922-18J3S (ORANGE) Site: NBU 922-18J PAD Rig Name No: PROPETRO/, H&P 298/298 Project: UTAH-UINTAH Start Date: 1/12/2009 End Date: 7/14/2009 **Event: DRILLING** Active Datum: RKB @4,887.00ft (above Mean Sea UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0 P/U MD From Operation **Duration** Phase Sub Time Code Date Start-End (hr) Code (11) 6:00 02 DRILL (ROTATE & SLIDE) F/ 4008' - T/ 4166' = 158' - 10:00 4.00 **DRLPRO** D @ 39.5 FPH / H2O + POLYMER / WOB 18/20 / RPM TOP DRV 35-38 / MTR 100 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1390-1200 / TQ ON/OFF 7K/3K / PU/SO/ROT 130/108/117 / H2O + POLY W/ WEIGHRTED SWEEPS / SLIDE 64' IN 1.75 HRS = 40% OF FOOTAGE & 43.7% OF HRS DRILLED / SCIENTIFIC DRILLING CONDUCTING RANGING OPERATIONS FOR COLLISION AVOIDANCE / 30' SURVEYS DEPENDING ON MAGNETIC INTERFERENCE CIRCULATE & CONDITION HOLE FOR B.H.A. TRIP 10:00 - 10:30 0.50 DRLPRO 05 С Р / PUMP 10 BBL PILL 10:30 - 12:30 2.00 DRLPRO 06 Α P.O.O.H. T/ 2800' / SPOT 45 BBLS 9.9 PPG MUD / P.O.O.H. FOR B.H.A. CHANGE CHANGE BEND IN MOTOR TO 1.83 DEG / CHECK **DRLPRO** Р 12:30 - 13:00 0.50 06 Α BIT / WORK ANNULAR, BLIND RAMS & PIPE RAMS / VISUAL INSPECTION ON B.O.P.E. 13:00 - 14:00 1.00 **DRLPRO** 06 Α T.I.H. TO 2900' / BREAK CIRCULATION 14:00 - 14:30 DRLPRO 07 P SERVICE RIG & EQUIPMENT 0.50 Р T.I.H. TO 4166' W/ NO FILL 14:30 - 15:00 06 0.50 DRLPRO Α DRILL (ROTATE & SLIDE) F/ 4166' - T/ 4323' = 157' 15:00 - 18:00 3.00 **DRLPRO** 02 D Р @ 52.33 FPH / H2O + POLYMER / WOB 18/20 / RPM TOP DRV 35-38 / MTR 100 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1370-1150 / TQ ON/OFF 7K/2K / PU/SO/ROT 133/110/118 / H2O + POLY W/ WEIGHTED SWEEPS / SLIDE 50' IN 1.25 HRS = 31.8% OF FOOTAGE & 41.6% OF HRS DRILLED DRLPRO P DRILL (ROTATE & SLIDE) F/ 4323' - T/ 4537' = 214' 18:00 - 0:00 02 D 6.00 @ 35.66 FPH / H2O + POLYMER / WOB 18/20 / RPM TOP DRV 35-38 / MTR 100 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1300-1160 / TQ ON/OFF 6K/3K / PU/SO/ROT 135/111/122 / H2O + POLY W/ WEIGHTED SWEEPS / SLIDE 166' IN 4.5 HRS = 77.5% OF FOOTAGE & 75% OF HRS DRILLED 7/5/2009 0:00 - 6:00 6.00 **DRLPRO** 02 D Р DRILL (ROTATE & SLIDE) F/ 4537' - T/ 4861' = 324' @ 54.0 FPH / H2O + POLYMER W/ WEIGHTED SWEEPS / WOB 18/20 / RPM TOP DRV 30-35 / MTR 101 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1315-1195 / TQ ON/OFF 7K/2K / PU/SO/ROT 136/110/123 / H2O + POLY / SLIDE 73' IN 1.75 HRS = 22.5% OF FOOTAGE & 29% OF HRS DRILLED / 5'-10' INTERMITTENT FLARE WHILE DRILLING 6:00 - 16:00 10.00 **DRLPRO** 02 D Ρ DRILL (ROTATE & SLIDE) F/ 4861' - T/ 5554' = 693' @ 69.3 FPH / H2O + POLYMER W/ WEIGHTED SWEEPS / WOB 18/20 / RPM TOP DRV 40-45 / MTR 101 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1550-1240 / TQ ON/OFF 8K/3K / PU/SO/ROT 166/124/138 / H2O + POLY / SLIDE 50' IN 2.0 HRS = 7.2% OF FOOTAGE & 20% OF HRS DRILLED / 5'-10' INTERMITTENT FLARE WHILE DRILLING SERVICE RIG & EQUIPMENT / WORK PIPE RAMS 16:00 - 16:30 0.50 **DRLPRO** 07 Α Ρ

/ VISUAL INSPECT B.O.P.E.

Operation Summary Report

Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Well: NBU 922-18J3S (ORANGE) Rig Name No: PROPETRO/, H&P 298/298 Site: NBU 922-18J PAD Project: UTAH-UINTAH Start Date: 1/12/2009 End Date: 7/14/2009 Event: DRILLING

Active Datum: Level)	RKB @4,887.00ft (above Mear	sea	UWI: 0/	9/S/22/E	E/18/0/N\	NSE/6/PM/S/1	453.00/E/0/2,564.00/0/0
Da te	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 0:00	7.50	DRLPRO	02	D	P	, vy	DRILL (ROTATE & SLIDE) F/ 5554' - T/ 6055' = 501' @ 66.8 FPH / H2O + POLYMER W/ WEIGHTED SWEEPS / WOB 18/20 / RPM TOP DRV 40-45 / MTR 101 RPM / PUMP SPM 101 = 455 GPM / SPP ON/OFF 1576-1344 / TQ ON/OFF 9K/4K / PU/SO/ROT 175/128/142 / H2O + POLY / SLIDE 65' IN .67 HRS. = 13% OF FOOTAGE & 8.9% OF HRS DRILLED / 5'-10' INTERMITTENT FLARE WHILE DRILLING
7/6/2009	0:00 - 6:00	6.00	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 6055' – T/ 6490' = 435' @ 72.5 FPH / H2O + POLYMER W/ WEIGHTED SWEEPS / WOB 18-20 / RPM TOP DRV 40-45 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1592-1352 / TQ ON/OFF 9K/6K / PU/SO/ROT 176/133/152 / H2O + POLY / SLIDE 14' IN .67 HRS = 3.2% OF FOOTAGE & 11.1% OF HRS DRILLED / 5'-10' INTERMITTENT FLARE WHILE DRILLING
	6:00 - 17:30	11.50	DRLPRO	02	D	Р		DRILL (ROTATE & SLIDE) F/ 6490' – T/ 6973' = 483' @ 42 FPH / WOB 14-22 / RPM TOP DRV 40-50 / MTR 103 RPM / PUMP SPM 104 = 468 GPM / SPP ON/OFF 1750-1450 / TQ ON/OFF 10K/6K / PU/SO/ROT 196/138/161 /34 VIS - 9.6 ppg / SLIDE 29' IN 1.75 HRS = 6.0% OF FOOTAGE & 15.2% OF HRS DRILLED / FLUSH HOLE W/ FRESH WATER & START MUD UP @ 6600' / TRANSFERED 600 BBLS OF CONDITIONED WHOLE MUD FROM STORAGE TO ACTIVE SYSTEM
	17:30 - 18:00	0.50	DRLPRO	07	Α	Р		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 19:30	1.50	DRLPRO	02	D	Р		DRILL (ROTATE) F/ 6973' - T/ 7035' = 62' @ 62 FPH / WOB 16-18 / RPM TOP DRV 40-50 / MTR 103 RPM / PUMP SPM 104 = 468 GPM / SPP ON/OFF 1710-1450 / TQ ON/OFF 10K/5K / PU/SO/ROT 196/138/161 /36 VIS - 9.7 ppg / ROTATING = 100% OF FOOTAGE DRIILLED
7/7/2000	19:30 - 0:00	4.50	DRLPRO	08	A	Z		TOP DRIVE SHUT DOWN / ELECTRICIANS & MECHANICS CALLED IN FROM GRAND JUNCTION, CO.FOR REPAIRS / REDUCE PUMP TO 50 SPM (225 GPM) & RECIPROCATE PIPE WORK ON TOP DRIVE SYSTEM
7/7/2009	0:00 - 1:30	1.50	DRLPRO	08	A	Z		WORK ON TOP DRIVE SYSTEM
	1:30 - 2:00	0.50	DRLPRO	02	D	Р		DRILL (ROTATE) F/ 7035' - T/ 7068' = 33' @ 66 FPH / WOB 16-18 / RPM TOP DRV 45 / MTR 103 RPM / PUMP SPM 104 = 468 GPM / SPP ON/OFF 1710-1450 / TQ ON/OFF 10K/5K / PU/SO/ROT 196/138/161 /36 VIS - 9.7 ppg / ROTATING = 100% OF FOOTAGE DRILLED
	2:00 - 6:00	4.00	DRLPRO	80	Α	Z		WORK ON TOP DRIVE SYSTEM / ENCODER + ISOLATION BARRIER
	6:00 - 16:00	10.00	DRLPRO	02	D	Р		DRILL (ROTATE) F/ 7068' - T/ 7445' = 377' @ 37.7 FPH / WOB 20-23 / RPM TOP DRV 35-45 / MTR 103 RPM / PUMP SPM 104 = 468 GPM / SPP ON/OFF 1950-1750 / TQ ON/OFF 10K/8K / PU/SO/ROT 215/142/164 /36 VIS - 9.7 ppg / ROTATING = 100% OF FOOTAGE DRILLED
	16:00 - 16:30	0.50	DRLPRO	07	Α	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.

Operation Summary Report

Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Well: NBU 922-18J3S (ORANGE) Site: NBU 922-18J PAD Rig Name No: PROPETRO/, H&P 298/298 Project: UTAH-UINTAH Start Date: 1/12/2009 Event: DRILLING End Date: 7/14/2009

Active Datum: Level)	RKB @4,887.0	Oft (above Mea	n Sea	UWI: 0	/9/S/22/I	E/18/0/N\	WSE/6/PM/S/1	,453.00/E/0/2,564.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	16:30 - 0:0		DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/ 7445' – T/ 7663' = 218' @ 29 FPH / WOB 20-23 / RPM TOP DRV 45-50 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1890-1750 / TQ ON/OFF 10K/7K / PU/SO/ROT 215/145/165 /36 VIS - 9.7 ppg / SLIDE 22' IN 1.75 HRS = 10.1% OF FOOTAGE & 23.3% OF HRS DRILLED
7/8/2009	0:00 - 6:0	0 6.00	DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/ 7663' – T/ 7849' = 186' @ 31 FPH / WOB 20-23 / RPM TOP DRV 45-50 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1890-1750 / TQ ON/OFF 10K/7K / PU/SO/ROT 215/145/165 /36 VIS - 9.7 ppg / SLIDE 17' IN 1.0 HRS = 9.1% OF FOOTAGE & 16.7% OF HRS DRILLED
	6:00 - 15:0	9.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7849' – T/ 8201' = 352' @ 39.1 FPH / WOB 20-23 / RPM TOP DRV 45-50 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 2000-1800 / TQ ON/OFF 11K/8K / PU/SO/ROT 220/150/174 /37 VIS - 10.4 ppg / SLIDE 17' IN 1.0 HRS = 5.5% OF FOOTAGE & 9% OF HRS DRILLED
İ	15:00 - 15:3	0.50	DRLPRO	07	Α	Р		RIG SERVICE/ WORK PIPE RAMS
	15:30 - 0:0	0 8.50	DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/8201' – T/8450' = 249' @29.2 FPH / WOB 20-23 / RPM TOP DRV 45-50 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 2100-1830 / TQ ON/OFF 11K/8K / PU/SO/ROT 225/145/179 /37 VIS - 10.4 ppg / SLIDE 47' IN 3.25 HRS = 20% OF FOOTAGE & 36% OF HRS DRILLED
7/9/2009	0:00 - 5:3	0 5.50	DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/ 8450' - T/ 8562' = 112' @ 20.3 FPH / WOB 20-23 / RPM TOP DRV 45-50 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 20541923 / TQ ON/OFF 13K/11K / PU/SO/ROT 220/145/179 /37 VIS - 10.4 ppg / SLIDE 16' IN 1.75 HRS = 7% OF FOOTAGE & 31% OF HRS DRILLED
1	5:30 - 6:0	0 0.50	DRLPRO	05	С	Р		CCH,PUMP SWEEP AROUND,F/ TRIP M MTR
	6:00 - 10:0	00 4.00	DRLPRO	06	Н	Z		PUMP SLUG ,POOH,,FUNCTION TEST BOP'S
	10:00 - 11:0		DRLPRO	06	A A	P P		LD / MWD,,BREAK BIT LD/ .22 MUD MTR,PU .16 ,MAKE UP BIT,ADJ MTR TO 1.83 BEND, ORIENT DIRECTIONAL TOOLS,SURFACE TEST MWD TIH TO CSG SHOE,INSTALL ROTATING HEAD
	11:00 - 12:0		DRLPRO	06	^			RUBBER.
	12:00 - 12:3		DRLPRO	07	Α	Р		FILL PIPE WHILE SERVICING RIG,UNABLE TO CIRC,PRESSURED UP
	12:30 - 16:0	00 3.50	DRLPRO	06	Α	X		POOH, WET,,FOUND LCM ON FLOAT TOP OF M MTR & IN ,EMITTER SUB,CLEARED PLUG & CIRC THRU BHA
	16:00 - 19:0	3.50	DRLPRO	06	Α	Р		TIH TO CSG SHOE,INSTALL ROTATING HEAD BREAK CIRC,CIH BREAK CIRC @ 5700,CIH TO 8500'
	19:30 - 20:0	0.50	DRLPRO	03	D	Р		W & R 60' TO BTM 2' FILL,50 BBL MUD LOSS ON TRIP
	20:00 - 0:0	0 4.00	DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/ 8562' - T/ 8686' = 124' @ 31 FPH / WOB 16-21 / RPM TOP DRV 40-50 / MTR 75 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 20541960 / TQ ON/OFF 13K/11K / PU/SO/ROT 250/165/180 /39 VIS - 10.6 ppg / SLIDE 31 IN 2 HRS = 38% OF FOOTAGE &50% OF HRS DRILLED

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Operation Summary Report

Spud Date: 1/12/2009 Spud Conductor: 12/13/2008 Well: NBU 922-18J3S (ORANGE) Rig Name No: PROPETRO/, H&P 298/298 Site: NBU 922-18J PAD Project: UTAH-UINTAH Start Date: 1/12/2009 End Date: 7/14/2009 Event: DRILLING

Active Datum: I Level)	RKB @4,887.00ft (above Mear	Sea	UWI: 0	/9/S/22/E	E/18/0/N	WSE/6/PM/S/1	453.00/E/0/2,564.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/10/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P	. Vy	DRILL (ROTATE/SLIDE) F/ 8686' – T/ 8790' = 103' @ 25.7 FPH / WOB 18-22 / RPM TOP DRV 45-50 / MTR 76 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2250/1950 / TQ ON/OFF 13K/11K / PU/SO/ROT 250/160/180 /39 VIS – 10.6 ppg / SLIDE 21' IN 2.5 HRS = 21% OF FOOTAGE & 37% OF HRS DRILLED
	6:00 - 15:00	9.00	DRLPRO	02	D	Р		DRILL (ROTATE/SLIDE) F/8790' – T/ 8897' = 107 @ 11.8 FPH / WOB 14-24 / RPM TOP DRV 30-60 / MTR 76 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2300/2000 / TQ ON/OFF 15K/11K / PU/SO/ROT 265/152/184 /39 VIS – 10.8 ppg / SLIDE 45' IN 4.75 HRS = 45% OF FOOTAGE & 55% OF HRS DRILLED
	15:00 - 0:00	9.00	DRLPRO	02	D	Р		
7/11/2009	0:00 - 1:00	1.00	DRLPRO	05	С	Р		CCH,CIRC OUT SWEEP,MIX SLUG /F BIT TRIP
	1:00 - 5:00	4.00	DRLPRO	06	Α	Р		TOH,STRAIGHT PULL 5 STDS (40-110K OVER)PUMP SLUG,TOH TO CSG SHOE ,CHECK F/ FLOW,PULL ROTATING RUBBER,TOH
	5:00 - 6:00	1.00	DRLPRO	06	Α	Р		BREAK BIT,L/D .16 DIRECTIONAL M MTR ADJ TO 1.83,PU .16 STRAIGHT M MTR,DUE TO HARD FORMATION,(SLIDING CONDITIONS)MAKE UP BIT,SURFACE TEST MWD & M MTR.
	6:00 - 7:00	1.00	DRLPRO	06	Α	Р		TIH TO CSG SHOE BREAK CIRC,
	7:00 - 8:00	1.00	DRLPRO	09	Α	P		CUT & SLIP DRILL LINE
	8:00 - 11:00	3.00	DRLPRO	06	A	P		TIH, BREAK CIRC @ 5800', CIH, CLEAN OUT BRIDGE @ 8340, -8345, CIH TO 8960'
	11:00 - 11:30	0.50	DRLPRO	03	D	P		W & R F/8960-9010 15' FILL
	11:30 - 15:30	4.00	DRLPRO	02	D	P		DRILL F/9010' - T/9152 = 142 @ 35.5 FPH / WOB 14-18 / RPM TOP DRV 45 / MTR 76 RPM / PUMP SPM 105 = 472 GPM / SPP ON/OFF 2350/2100 / TQ ON/OFF 15K/10K / PU/SO/ROT 265/155/189 /39 VIS - 11.0 ppg
	15:30 - 16:00	0.50	DRLPRO	07	Α	Р		RIG SERVICE,WORK PIPE RAMS
	16:00 - 0:00	8.00	DRLPRO	02	D	Р		DRILL F/9152' - T/9439 = 142 @ 35.5 FPH / WOB 14-18 / RPM TOP DRV 45 / MTR 76 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 2130/1963 / TQ ON/OFF 14K/12K / PU/SO/ROT 265/155/189 /41 VIS - 11.2 ppg BYPASS SHAKERS @ 9350' LCM TO 5% LOST 125 BBLS MUD.
7/12/2009	0:00 - 6:00	6.00	DRLPRO	02	D	Р		DRILL F/ 9439 – T/ 9650' = 211' @ 35.1 FPH / WOB 14-18 / RPM TOP DRV 40-50 / MTR 72 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 2230/1950 / TQ ON/OFF 13K/10K / PU/SO/ROT 268/155/190 /40 VIS – 11.3 ppg LCM 18% LOST 50 BBLSMUD
	6:00 - 15:00	9.00	DRLPRO	02	D	Р		DRILL F/ 9650 - T/ 9875' TD= 225' @25 FPH / WOB 16-22 / RPM TOP DRV 40-50 / MTR 72 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 2230/1950 / TQ ON/OFF 13K/10K / PU/SO/ROT 268/155/190 /40 VIS - 11.6 ppg LCM 20% LOST 95 BBLS
	15:00 - 16:30	1.50	DRLPRO	05	F	Р		CCH F/ WIPER TRIP, PUMP SWEEP MW 11.7 VIS 41 LCM 15%
	16:30 - 21:30	5.00	DRLPRO	06	E	Р		PUMP & ROTATE TO 8832,50-90 OVER,STRAIGHT PULL TO 7845' PULLED 100K OVER,BACK BEAM 7845-7842,TOH WORK THRU TIGHT SPOT @ 6626,60K OVER,TOH TO 2850'
	21:30 - 0:00	2.50	DRLPRO	06	E	P		TIH, CLEAN OUT TIGHT SPOTS@ 7845 @ 8342 & 9344, CIH TO 9805'

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Operation Summary Report

 Well: NBU 922-18J3S (ORANGE)
 Spud Conductor: 12/13/2008
 Spud Date: 1/12/2009

 Project: UTAH-UINTAH
 Site: NBU 922-18J PAD
 Rig Name No: PROPETRO/, H&P 298/298

 Event: DRILLING
 Start Date: 1/12/2009
 End Date: 7/14/2009

UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0

Active Datum: RKB @4,887.00ft (above Mean Sea

Level)	1(100):001							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
7/13/2009	0:00 - 0:30	0.50	DRLPRO	03	D	Р	· · · · · · · · · · · · · · · · · · ·	W & R 9805-9875 TD 15' FILL,8 BBL MUD LOSS ON TRIP
	0:30 - 2:30	2.00	DRLPRO	05	Α	Р		CCH,TO LDDS,SM RU LD MACHINE, MUD WT TO11.8 VIS 43 LCM 12%,TRIP GAS 5396 U, 5' FLARE
	2:30 - 4:00	1.50	DRLPRO	06	В	Р		TOH PUMP & ROTATE OUT TO 9026 30-70 OVER, STRAIGHT PULL TO 7750' 40-75 OVER
	4:00 - 5:00	1.00	DRLPRO	05	С			CIRC ,FINISH RU LD MACH,PUMP SLUG
	5:00 - 13:30	8.50	DRLPRO	06	В	Р		LDDS TO BHA,RUN 26 STDS IN HOLE,LDDP & BHA,PULL WEAR BUSHING
	13:30 - 20:00	6.50	DRLPRO	11	G	Р		SM RIG UP HALCO,RUN TRIPLE COMBO F/ 9862" TO SURFACE,RD SAME
	20:00 - 22:00	2.00	DRLPRO	12	Α	Р		HSM W/ WESTATES CASERS & RIG CREW RU AIR TOOLS & EQUIPMENT + FILL & CIRC TOOLS + 18' BAILS
	22:00 - 0:00	2.00	DRLPRO	12	С	Р		RUN 3 JTS P-110 #11.6 LT&C 4.5 CASING + 65 JTS I-80 #11.6 LT&C 4.5 CASING + F.C. TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS CURRENTLY @ CSG SHOE 2850'
7/14/2009	0:00 - 7:30	7.50	DRLPRO	12	С	Р		RUN 3 JTS P-110 #11.6 LT&C 4.5 CASING + 231 JTS I-80 #11.6 LT&C 4.5 CASING + F.C. TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS, LANDED @ 9869' FC @ 9833'
	7:30 - 9:00	1.50	DRLPRO	05	D	Ρ		CIRC CSG, HSM RU UP BJ
	9:00 - 12:00	3.00	DRLPRO	12	E	P		TEST PUMPS & LINES TO 4k PSI / PUMP 40 BBLS H2O + 630 SX LEAD CEMENT @ 11.7 ppg (PREM LITE II + .05Ilbs/sx STATIC FREE + .25 pps CELLOFLAKE + 5 pps KOL SEAL + 8% bwoc BENTONITE + .2% bwoc SODIUM METASILICATE + 136.2% FRESH WATER / (14.21 gal/sx, 2.50 yield) + 1260 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ) + 10% SALT + .05Ilbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 58.6% H2O / (5.90 gal/sx, 1.31 yield) / DROP PLUG & DISPLACE W/ 152 BBLS H2O + ADDITIVES / GOOD RETURNS THROUGH JOB / LIFT PRESSURE @ 2500 PSI (CALC TOP OF TAIL @ 3420' / BUMP PLUG W/ 3000 PSI - HOLD 5 MINUTES W/ NO LOSS / PLUG DOWN @ 11:30 HOURS W/ 5 BBLS CEMENT TO PIT / FLOATS HELD W/ 1.5 BBLS BACK TO INVENTORY,R/ D CMT EQUIP
	12:00 - 13:00	1.00	DRLPRO	14	В	Р		L/D LANDING JT,SET PACKOFF & TEST TO 5K
	13:00 - 16:00	3.00	DRLPRO	14	Α	Р		NIPPLE DOWN BOPE,ROT HEAD/SPACER SPOOLS/ FMC DRILL ADAPTER,CLEAN MUD TANKS,RELEASE RIG @ 1600 HRS 7/14/2009 TO NBU 922-18D3BS

US ROCKIES REGION Operation Summary Report Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Site: NBU 922-18J PAD Rig N

Rig Name No: GWS 1/1

3:48 SWI FN, XO T/ GREEN WELL.

 Event: COMPLETION
 Start Date: 8/23/2009
 End Date: 9/28/2009

 Active Datum: RKB @4,887.00ft (above Mean Sea
 UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0

evel)								
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/19/2009 9/21/2009	7:00 - 15:00 7:00 - 7:10	8.00	COMP	36 48	В	P P	(iy	HSM. STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE HSM. STG 1) 9:40 AM, OPEN WELL 1030#. BEG PUMP, BRK @ 5037# @ 5.3 BPM. SD ISIP 2550# FG .69. BEG FRAC. EST INJT RT @ 47.8 BPM @ 6077# = 62% OPEN. PUMP 39,112# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2830# FG .72. SWI. FRAC CREW X-OVER T/ GREEN WELL.
								((WHILE PUMP STG #1, PUMP #6 MOTOR BLEW UP. STARTED ON FIRE. SD PUMPING. CONTOL FIRE W/ FIRE EXT. NO BODY GOT HURT. MADE SURE FIRE WAS OUT COMPLETELY. FINISH FRAC.))
								STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIF SET CBP @ 9554' P/U PERF F/ 9520'-24', 4 SPF, 16 HOLES. 9450'-52', 4 SPF, 8 HOLES. 9426'-30', 3 SPF, 12 HOLES.
								9344'-46', 3 SPF, 6 HOLES. POOH. 2:28 OPEN WELL 2640#. BEG PUMP, BRK @ 3704# @ 5.3 BPM. SD ISIP 2850# FG . 73. BEG FRAC, EST INJT RT @ 50.2 BPM @ 5854# =66% PERFS OPEN. PUMP 44,935# 30/50 WHITE & TA IN W/ 5,000# 20/40 TLC. SD ISIP 2950# FG .74.

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Well: NBU 922-18J3S (ORANGE)

Project: UTAH-UINTAH

Well: NBU 922-18J3S (ORANGE) Spud C					: 12/13/2	800	Spud Date: 1/	12/2009
Project: UTAH-UINTAH Site: NE					BJ PAD			Rig Name No: GWS 1/1
Event: COMPL	Start Da	te: 8/23/	2009			End Date: 9/28/2009		
Active Datum: l Level)	RKB @4,887.00ft (· · · · · · · · · · · · · · · · · · ·						453.00/E/0/2,564.00/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
9/22/2009	7:00 - 19:30	12.50	COMP	36	В	Р		STG 3) OPEN WELL 2000#. PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN. 23 GM .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 9250' P/U PERF F/ 9214'-20', 3 SPF, 18 HOLES.

PUMP 66,708# 30/50 WHITE. CUT SAND 10,948# SHORT = 85% OF FRAC PUMPED.

NO 20/40 TLC IN THIS STG.

STG 4) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN. 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING.
RIH SET CBP @ 8990' P/U PERF F/8958'-60', 4 SPF, 8 HOLES.

BEG PUMP, BRK @ 3198# @ 6.3 BPM. SD ISIP

BEG FRAC, EST INJT RT @ 51.9 BPM @ 5600#

8922'-24', 4 SPF, 8 HOLES. 8868'-72', 3 SPF, 12 HOLES. 8824'-26', 3 SPF, 6 HOLES. 8792'-94', 3 SPF, 6 HOLES. POOH.

9018'-20', 4 SPF, 8 HOLES.

11:09 AM OPEN WELL 1300#.

POOH.

2500# FG .69.

=72% OPEN PERFS.

1:25 OPEN WELL **2245#**. BEG PUMP, BRK @ 2700# @ 6.3 BPM. SD ISIP 2250# FG .68. BEG FRAC, EST INJT RT @ 51.9 BPM @ 5050# =

100% PERFS OPEN. PUMP 88,351# 30/50 WHITE & TAIL IN W/ 5,000#

20/40 TLC. SD ISIP 2500# FG .71.

2:15 SWI.

STG 5) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8764' P/U PERF F/8730'-34', 4 SPF, 16 HOLES. 8698'-00', 4 SPF, 8 HOLES. 8590'-94', 3 SPF, 12 HOLES. 8556'-58', 3 SPF, 6 HOLES.

POOH. SWI. SDFN.

US ROCKIES REGION Operation Summary Report Spud Date: 1/12/2009 Spud Conductor: 12/13/2008 Well: NBU 922-18J3S (ORANGE) Rig Name No: GWS 1/1 Site: NBU 922-18J PAD Project: UTAH-UINTAH End Date: 9/28/2009 Start Date: 8/23/2009 Event: COMPLETION UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0 Active Datum: RKB @4,887.00ft (above Mean Sea Level) P/U MD From Operation Sub Date Duration Phase Code Time (hr) Code (ft) Start-End STG 5) 9:22AM OPEN WELL 1950#. P 7:00 - 18:00 11.00 COMP 36 В 9/23/2009 BEG PUMPING, BRK @ 3172# @ 6.3 BPM. SD ISIP 2300# FG .70. BEG FRAC, EST INJT RT @ 51.2 BPM @ 4989# = 84% PERF'S OPEN. PUMP 58,444# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2750# FG .75. 9:57 SWI. FRAC CREW X-OVER T/ YELLOW. STG 6) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8466' P/U PERF F/ 8432'-36', 4 SPF, 16 HOLES. 8412'-14', 3 SPF, 6 HOLES. 8338'-40', 3 SPF, 6 HOLES. 8300'-04', 3 SPF, 12 HOLES. POOH. 12:42 PM OPEN WELL 1750#. BEG PUMPING, BRK @ 3612 @ 10.3 BPM. SD ISIP BEG FRAC, EST INJT RT @ 49.6 BPM @ 4800# = 100% PERF'S OPEN. SD ISIP 2700# FG .75. 1:18 PM SWI. X-OVER T/ GREEN STG 7) PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90, 120 & 180 DEG PHASING. RIH SET CBP @ 8182' P/U PERF F/ 8148'-52', 4 SPF, 16 HOLES. 7970'-74', 2 SPF, 8 HOLES. 7918'-24', 3 SPF, 18 HOLES. POOH. 4:49 PM OPEN WELL 902#. BEG PUMPING, BRK @ 3430# @ 6.3 BPM. SD ISIP 1600# FG .63. BEG FRAC, EST INJT RT @ 51 BPM @ 4130# =85% PERF'S OPEN. PUMP 61,798# 30/50 WHITE & TAIL IN W/ 5,000# 20/40 TLC. SD ISIP 2600# .75. 5:25 PM SWI, SDFN. PU 4 1/2 8K HAL CBP. RIH SET CBP @ 7868'. Ρ 9/24/2009 7:00 - 15:00 8.00 COMP 34 POOH. SWI. RDMO WL & FRAC CREW.

7:00 - 7:15

9/28/2009

0.25

COMP

48

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JSA-SAFETY MEETING #1, DAY 1

Operation Summary Report

Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Well: NBU 922-18J3S (ORANGE) Rig Name No: GWS 1/1 Site: NBU 922-18J PAD Project: UTAH-UINTAH

							End Date: 0/29/2000		
Event: COMPI	LETION		Start Da	ite: 8/23/				End Date: 9/28/2009	
Active Datum: Level)	RKB @4,887.00ft	(above Mean	Sea	UWI: 0	/9/S/22/	E/18/0/N	NSE/6/PM/S/1	453.00/E/0/2,564.00/0/0	
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation	
	Time Start-End 7:15 - 12:00	Duration (hr) 4.75	Phase	31 31		P/U P	MD From (ft)	Operation MIRU, N/D FRAC VALVE, N/U BOPS, R EQUIP, P/U RIH W/ 3 7/8 BIT & POBS, RIH W/ 2 3/8" TBG, TAG @ 7868', F SWIVEL, ESTIB. CIRC DN TBG OUT CS (DRLG CBP #1) 7868', DRILL OUT HA 8K CBP IN 10 MIN, 50 # DIFF, RIH TAG C/O 42 'SAND, FCP = 50 #, (DRLG CBP #2) 8182', DRILL OUT HA 8K CBP IN 15 MIN, 0 # DIFF, RIH TAG C/O 66 'SAND, FCP = 50 #, (DRLG CBP #3) 8466', DRILL OUT HA 8K CBP IN 20 MIN, 50 # DIFF., RIH TAG C/O 30 'SAND, FCP = 100 #, (DRLG CBP #4) 8770', DRILL OUT HA 8K CBP IN 15 MIN, 25 # DIFF, RIH TAG C/O 40 'SAND, FCP = 125 #, (DRLG CBP #5) 8990', DRILL OUT HA 8K CBP IN 15 MIN, 50 # DIFF, RIH TAG C/O 25 'SAND, FCP = 175 #, (DRLG CBP #6) 9250', DRILL OUT HALLIBURTON 8K CBP IN 15 MIN, 100 RIH TAG @ 9524',	TALLY AND RIU POWER SG, LLIBURTON @ 8140', LLIBURTON @ 8400', LLIBURTON AG @ 8740 LLIBURTON G @ 8950', LLIBURTON G @ 9225',
								C/O 30 ' SAND, FCP = 275 #, (DRLG CBP #7) 9554', DRILL OUT HALLIBURTON 8K CBP IN 15 MIN, 125 RIH TAG @ 9750 ', C/O 48' SAND, TO PBTD @ 9798', F CIRC WELL CLEAN, R/D POWER SWIN LAY DN 16 JTS ON TRAILER, LAND T HANGER 293 JTS 2 3/8" L-80 TBG, EOT @ 9314' EQUIP, N/D BOPS, N/U WH, DROP BAI PUMP OFF THE BIT @ 3100 #, WAIT 3 BIT TO FALL TO BTTM, OPEN WELL U ON 20/64 CHOKE, FTP = 1300 # SICP = TURN WELL OVER TO FBC @ 6:30 PN BBLS WTR LTR, AVG. 15 MIN / PLUG, W @ 292' SAND	CP = 400 #, /EL, POOH BG W/ , R/D TBG LL DN TBG 0 MIN FOR IP TO FBY = 1600 #, M, W/ 9379
								PLUG. KB = HANGER =	26.00' .83' 273.11' 2.20'
									302.14'
								316 JTS 2 3/8" L-80 TBG DELV. 293 JTS LANDED	

23 JTS RETURNED

FTP 1950#, CP 3200#, 1.6 MCFD, 38 BWPD, 20/64

CK

US ROCKIES REGION Operation Summary Report Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Well: NBU 922-18J3S (ORANGE) Rig Name No: GWS 1/1 Site: NBU 922-18J PAD Project: UTAH-UINTAH Start Date: 8/23/2009 End Date: 9/28/2009 Event: COMPLETION UWI: 0/9/S/22/E/18/0/NWSE/6/PM/S/1,453.00/E/0/2,564.00/0/0 Active Datum: RKB @4,887.00ft (above Mean Sea Level) Operation P/U MD From Duration Sub Date Time Phase Code (ft) Code Start-End (hr) 7 AM FLBK REPORT: CP 1950#, TP 1850#, 20/64" 7:00 33 9/29/2009 CK, 52 BWPH, LIGHT SAND, LIGHT GAS TTL BBLS RECOVERED: 3029 **BBLS LEFT TO RECOVER: 8654** 7 AM FLBK REPORT: CP 3100#, TP 2025#, 20/64" 7:00 -33 9/30/2009 CK, 38 BWPH, LIGHT SAND, LIGHT GAS TTL BBLS RECOVERED: 4065 BBLS LEFT TO RECOVER: 7618 WELL TURNED TO SALE @ 0900 HR ON 9/30/09 -9:00 -**PROD** 50

10/1/2009 7:57:51AM

Form 3160-4 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOC

	VVELL (COMP	LETION	אל אנ	COIVI	PLEIN	JN K	EPUR	XI A	ND L	OG			JTU461	NO.	
la. Type of	f Well Graph of Completion	Oil Well	☑ Gas New Well		Dry ork Over	_	Other eepen	n p	Plug B	ack	Diff. F) actor	6. If	Indian, All	ottee o	r Tribe Name
o. Type o.	Completion		er	_	JK OVCI	۵ ت		<u>.</u>	i iug D	ack	Dill. F	cesvi.	7. U	nit or CA A	greem A	ent Name and No.
2. Name of KERR-	Operator MCGEE OII	L&GAS (ONSHORE	ЫЯail: а		ontact: A lytle@ar								ease Name IBU 922-1		ell No.
3. Address	P.O. BOX DENVER							. Phone 1: 720-			area code)	9. A	PI Well No	•	43-047-39842
4. Location	of Well (Re	port locat	ion clearly a	nd in ac	cordance	with Fed	leral re	quireme	ents)*				10. I	Field and Po	ool, or	Exploratory
At surfa	ice NWSE	1482FS	L 2523FEL	40.032	281 N La	at, 109.4	8232 V	V Lon					11. 5	Sec., T., R.,	M., or	Block and Survey
	rod interval	- 1)		0FSL 2	052FEL								r Area Se County or P		9S R22E Mer 13. State
At total 14. Date Sp		SE 1861	FSL 2080F		. Reache	bec	HS			omplete				JINTÁH Elevations (DE K	UT B, RT, GL)*
12/13/2				/12/20		u .) & A 9/30/2	_ □	Ready to F	rod.	17. 1	480	51 GL	b, K1, GL)
18. Total D	epth:	MD TVD	9875 9779		19. Pl	ug Back	Γ.D.:	MD TVI		979		20. Dep	th Bri	dge Plug Se		MD TVD
21. Type E	lectric & Oth CRT_SDL_I	er Mecha DSN-TRI	mical Logs R IPLE COME	un (Sub O	mit copy	of each)	1				22. Was Was Direc	well cored DST run? tional Sur	? vey?	☑ No ☑ No ☐ No	🗖 Yes	s (Submit analysis) s (Submit analysis) s (Submit analysis)
23. Casing ar	nd Liner Rec	ord (Repo	ort all strings	T						•		T				
Hole Size	Size/G	rade	Wt. (#/ft.)	(M	^ I	Bottom (MD)	_	: Cemen Depth			f Sks. & f Cement	Slurry (BB)		Cement '	Гор*	Amount Pulled
20.000		STEEL	36.7	1		4(28					
12.250 7.875		525 J-55 500 I-80				284 ⁻ 984;			\dashv		720 1894	+				
1.070		000100	11.0			304	1				103-					
24. Tubing	Record		<u> </u>				J					<u> </u>		<u> </u>		
	Depth Set (M	(ID) P	acker Depth	(MD)	Size	Dep	th Set (MD)	Pacl	ker Dep	th (MD)	Size	De	epth Set (M	D)	Packer Depth (MD)
2.375		9302														
25. Produci	ormation		Т		D-4-			ration R		******			Τ,		Τ	D 6 6 4
A)	MESAVE	RDE	Тор	7918	Botto	9750		Perforat			0 9750	Size 0.36		No. Holes 286	OPE	Perf. Status
B) .																
C)	······································												_			
D) 27. Acid, Fr	acture, Treat	ment, Cer	ment Squeez	e, Etc.		_									L	
	Depth Interva	al									Type of M	1aterial				
	79	18 TO 9	750 PMP 11	,418 BB	LS SLIC	K H20 &	148,467	LBS 30)/50 SI	D						7-10-1
							-					·				
28. Product	ion - Interval	A Hours	Test	Oil	Icar		Water	lo:	:1 C		Ic.,		D 1 (
Produced 09/30/2009	Date 10/04/2009	Tested 24	Production	BBL 26.	Gas MC		Water BBL 100	Co	il Gravit orr. API		Gas Gravit		Producti	ion Method FLOV	VS ERI	OM WELL
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas		Water	Ga	as:Oil		Well S	tatus		1 200	VO 1 100	JW WELL
20/64	Flwg. 1356 SI	1455.0	Rate	BBL 26	МС	2093	BBL 100		atio		F	PGW				
	tion - Interva													<i></i>		
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MC		Water BBL		il Gravit orr. API		Gas Gravit	y	Producti	ion Meth	CE	IVED
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MC		Water BBL		as:Oil atio		Well S	tatus	_	NO	705	EIVED 2009
See Instructi ELECTRON	ions and spac NIC SUBMIS	SSION #	ditional data 76892 VERI	FIED B	Y THE	BLM W	ELL II	NFORM	MATI(ON SY	STEM			ייי טר טונ	, GAS	& MINING

28b. Produ	uction - Interv	al C					,				
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF		Oil Gravity Corr. API	Gas Gravi	ty	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF		Gas:Oil Ratio	Well	Status		
28c. Produ	uction - Interv	al D	· 1								
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF		Oil Gravity Corr. API	Gas Gravi	ty	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF		Gas:Oil Ratio	Well	Status	<u> </u>	
29. Dispos	sition of Gas(S	Sold, used j	or fuel, vent	ed, etc.)	I						
	ary of Porous	Zones (Inc	lude Aquife	rs):					31. For	mation (Log) Markers	
Show tests, i	all important a	zones of po	rosity and co	ontents there		ntervals and all flowing and sh	drill-stem ut-in pressures			(3)	
	Formation		Тор	Bottom		Descriptions,	, Contents, etc.			Name	Top Meas. Depth
ATTA	NY H RDE	HIS COMI	PLETION F	7685 9815 9815 edure):	THE CHR	ONOLOGICA	AL WELL HISTO	RY AN	ND END	OF WELL	
1. Ele 5. Sur	enclosed attace ectrical/Mecha ndry Notice fo	nical Logs r plugging	and cement	verification	tion is comp		sis ct as determined fi	7		e records (see attached instru	ctional Survey
	,,	A h m >		ronic Subm For KERR-	ission #768 MCGEE O	92 Verified by IL&GAS ON	y the BLM Well I SHORE, LP, ser	at to th	ie Vernal		
Name	(please print)	,					Title REG	ULAT	URY AN	ALYSI	
Signat	ture	(Electroni	c Submissi	on)	***************************************		Date <u>11/0</u> 5	5/2009	9		
Title 18 U	J.S.C. Section	1001 and T	itle 43 U.S.	C. Section 1	212, make i	t a crime for an	ny person knowing	gly and	willfully	to make to any department	or agency



ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27) NBU 922-18 PAD IJNOP NBU 922-18J3S

1

Survey: FINAL

Standard Survey Report

13 July, 2009







10400

-900

2700

3600

900

0

1800

NBU 922-18J3S UINTAH COUNTY, UTAH (nad 27) SECTION 18 T9S R22E LAT: 40° 1' 58.249 N LONG: 109° 28' 53.879 W RIG: HP 298



WELL DETAILS: NBU 922-18J3S

Ground Level: 4861.00

+N/-S +E/-W Northing Easting Latittude Longitude Slot
0.00 0.00 14541628.13 2065452.84 40° 1′ 58.249 N 109° 28′ 53.879 W

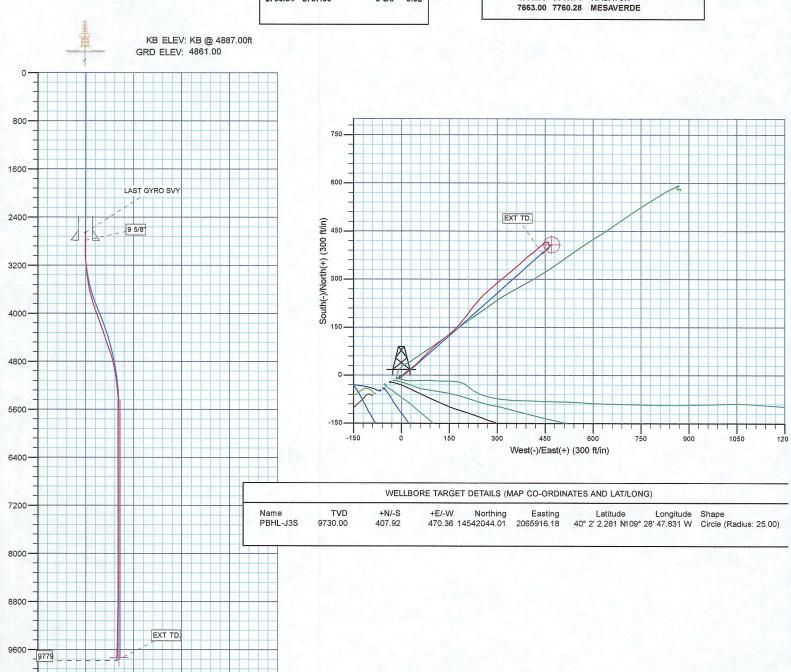
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	2660.00	1.00	187.35	2659.96	-4.36	-5.89	0.00	0.00	-7.31	
2	2887.00	1.00	187.35	2886.92	-8.29	-6.40	0.00	0.00	-10.26	
3	3915.28	24.95	48.34	3883.94	129.28	157.21	2.50	-140.38	203.47	
4	4064.16	24.95	48.34	4018.93	171.02	204.12	0.00	0.00	266.26	
5	5727.28	0.00	0.00	5630.00	407.92	470.36	1.50	180.00	622.61	
6	9827.28	0.00	0.00	9730.00	407.92	470.36	0.00	0.00	622.61	PBHL-J3S

CASING DETAILS								
TVD	MD	Name						
2786.94	2787.00	9 5/8"	9.62					

TVDPath MDPath Formation
4956.00 5049.74 WASATCH

Survey: Survey #2 (NBU 922-18J3S/1)

Created By: Robert H. Scott







Weatherford International Ltd





Company:

ANADARKO PETROLEUM CORP.

Project:

UINTAH COUNTY, UTAH (nad 27)

Site:

Well:

NBU 922-18 PAD IJNOP

Wellbore: Design:

NBU 922-18J3S

1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Database:

KB @ 4887.00ft KB @ 4887.00ft

Well NBU 922-18J3S

North Reference:

True

Survey Calculation Method:

Minimum Curvature

EDM 2003.21 Single User Db

Project

UINTAH COUNTY, UTAH (nad 27),

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Fee System Datum:

NAD 1927 - Western US

Map Zone:

Zone 12N (114 W to 108 W)

Mean Sea Level

Site

NBU 922-18 PAD IJNOP

Site Position:

Northing:

14,541,563.95 ft

Latitude:

40° 1' 57.630 N

From:

Lat/Long

Easting:

2,065,363.48ft

Longitude:

Position Uncertainty:

0.00 ft

Slot Radius:

0.00 in

Grid Convergence:

109° 28' 55.042 W

0.98°

Well

NBU 922-18J3S, 1453 FSL, 2564 FEL - SEC18 T9S R22E

Well Position

+N/-S

0.00 ft

Northing:

14,541,628.13 ft

Latitude:

40° 1' 58.249 N

+E/-W

0.00 ft

Easting:

2,065,452.84 ft

Longitude:

109° 28' 53.879 W

Position Uncertainty

0.00 ft

Wellhead Elevation:

ft

Ground Level:

4,861.00 ft

Wellbore

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

BGGM2008

6/26/2009

11.35

65.98

52,561

Design

1

Audit Notes:

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.00

Vertical Section:

Depth From (TVD)

+N/-S

+E/-W

Direction

(ft) 0.00

(ft) 0.00

(ft) 0.00

(°) 49.57

Survey Program

Date 7/13/2009

From (ft)

100.00

2.947.00

То

(ft) Survey (Wellbore)

2,660.00 Survey #1 (1)

9,875.00 Survey #2 (1)

Tool Name

Description

Gyrodata RGS_WB MWD

GyroCompass Mode MWD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2.660.00	1.00	187.35	2,659.96	-4.36	-5.89	-7.31	0.00	0.00	0.00
2,947.00	1.30	169.81	2,946.90	-10.05	-5.64	-10.80	0.16	0.10	-6.11
3,042.00	2.41	37.52	3.041.87	-9.52	-4.23	-9.39	3.60	1.17	-139.25
3,136.00	4.58	43.54	3,135.69	-5.23	-0.44	-3.73	2.34	2.31	6.40
3,231.00	5.57	43.92	3,230.32	0.84	5.37	4.63	1.04	1.04	0.40
3,326.00	8.90	52.14	3,324.55	8.67	14.37	16.57	3.66	3.51	8.65
3,421.00	9.63	53.65	3,418.31	17.89	26.58	31.83	0.81	0.77	1.59
3,513.00	10.69	51.46	3,508.87	27.77	39.45	48.04	1.23	1.15	-2.38
3,608.00	14.02	44.70	3,601.66	41.44	54.44	68.32	3.82	3.51	-7.12
3,702.00	16.77	44.76	3,692.28	59.17	72.00	93.18	2.93	2.93	0.06
3,797.00	16.89	45.14	3,783.21	78.63	91.43	120.60	0.17	0.13	0.40
3,892.00	20.79	51.76	3,873.11	98.81	114.47	151.22	4.68	4.11	6.97





Weatherford International Ltd

Survey Report



Company:

ANADARKO PETROLEUM CORP.

Project: UINTAH COUNTY, UTAH (nad 27)

Site:

NBU 922-18 PAD IJNOP

Well:

NBU 922-18J3S

Wellbore: 1 Design: 1 **Local Co-ordinate Reference:**

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well NBU 922-18J3S KB @ 4887.00ft

KB @ 4887.00ft

True

Minimum Curvature

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100 ft)
3,987.00	23.46	51.22	3,961.11	121.10	142.46	186.97	2.82	2.81	-0.57
4,082.00	21.63	43.96	4,048.86	145.55	169.36	223.31	3.50	-1.93	-7.64
4,177.00	23.31	39.35	4,136.65	172.70	193.44	259.24	2.56	1.77	-4.85
4,271.00	21.19	35.89	4,223.65	200.84	215.19	294.06	2.65	-2.26	-3.68
4,366.00	21.38	40.35	4,312.18	227.95	236.47	327.83	1.72	0.20	4.69
4,461.00	20.56	45.73	4,400.89	252.80	259.63	361.57	2.20	-0.86	5.66
4,556.00	21.81	50.73	4,489.48	275.61	285.24	395.87	2.31	1.32	5.26
4,651.00	22.00	49.73	4,577.62	298.29	312.48	431.30	0.44	0.20	-1.05
4,745.00	20.38	50.60	4,665.26	320.06	338.56	465.28	1.76	-1.72	0.93
4,840.00	16.31	48.85	4,755.42	339.34	361.40	495.17	4.32	-4.28	-1.84
4,935.00	13.31	46.43	4,847.25	355.66	379.37	519.43	3.22	-3.16	-2.55
5,029.00	12.25	51.10	4,938.92	369.38	394.97	540.21	1.57	-1.13	4.97
5,123.00	9.88	51.85	5,031.17	380.63	409.08	558.23	2.53	-2.52	0.80
5,217.00	8.00	49.48	5,124.02	389.86	420.39	572.84	2.04	-2.00	-2.52
5,312.00	7.38	48.85	5,218.17	398.17	430.01	585.55	0.66	-0.65	-0.66
5,407.00	6.63	49.98	5,312.46	405.71	438.81	597.13	0.80	-0.79	1.19
5,502.00	5.19	44.73	5,406.95	412.29	446.03	606.90	1.62	-1.52	-5.53
5,597.00	3.19	77.10	5,501.71	415.94	451.63	613.53	3.18	-2.11	34.07
5,692.00	2.44	98.23	5,596.59	416.24	456.21	617.20	1.33	-0.79	22.24
5,787.00	1.06	113.60	5,691.55	415.60	459.02	618.93	1.52	-1.45	16.18
5,882.00	0.25	130.35	5,786.54	415.11	459.98	619.34	0.87	-0.85	17.63
5,976.00	0.50	157.85	5,880.54	414.60	460.29	619.25	0.32	0.27	29.26
6,071.00	0.88	149.10	5,975.53	413.59	460.82	619.00	0.41	0.40	-9.21
6,166.00	0.63	341.73	6,070.53	413.46	461.03	619.07	1.58	-0.26	-176.18
6,260.00	0.31	303.35	6,164.53	414.09	460.66	619.20	0.46	-0.34	-40.83
6,355.00	0.19	223.23	6,259.52	414.11	460.34	618.97	0.35	-0.13	-84.34
6,449.00	0.31	169.10	6,353.52	413.75	460.28	618.69	0.27	0.13	-57.59
6,543.00	0.41	175.40	6,447.52	413.17	460.35	618.37	0.11	0.11	6.70
6,638.00	0.81	170.73	6,542.52	412.16	460.49	617.82	0.42	0.42	-4.92
6,731.00	1.13	174.22	6,635.50	410.60	460.69	616.96	0.35	0.34	3.75
6,826.00	0.75	137.60	6,730.49	409.21	461.20	616.45	0.73	-0.40	-38.55
6,921.00	0.25	326.60	6,825.49	408.93	461.50	616.49	1.05	-0.53	-180.00
7,016.00	0.38	322.48	6,920.49	409.35	461.20	616.53	0.14	0.14	-4.34
7,109.00	0.19	305.73	7,013.49	409.68	460.89	616.51	0.22	-0.20	-18.01
7,204.00	0.25	234.73	7,108.49	409.66	460.59	616.27	0.27	0.06	-74.74
7,298.00	0.50	180.73	7,202.48	409.13	460.42	615.80	0.43	0.27	-57.45
7,393.00	0.94	181.35	7,297.48	407.93	460.39	615.00	0.46	0.46	0.65
7,488.00	0.63	52.85	7,392.47	407.47	460.79	615.01	1.50	-0.33	-135.26
7,582.00	0.75	74.97	7,486.46	407.94	461.80	616.08	0.31	0.13	23.53
7,677.00	0.81	107.10	7,581.46	407.91	463.04	617.00	0.46	0.06	33.82
7,771.00	0.44	310.85	7,675.45	407.95	463.40	617.30	1.30	-0.39	-166.22
7,865.00	0.26	296.47	7,769.45	408.28	462.94	617.16	0.21	-0.19	-15.30
7,960.00	0.25	169.73	7,864.45	408.17	462.78	616.97	0.48	-0.01	-133.41
8,055.00	0.88	139.23	7,959.45	407.41	463.29	616.87	0.71	0.66	-32.11
8,149.00	1.38	149.60	8,053.43	405.89	464.34	616.68	0.57	0.53	11.03
8,244.00	1.69	198.73	8,148.40	403.58	464.47	615.28	1.38	0.33	51.72
8,339.00	0.50	290.85	8,243.38	402.40	463.63	613.88	1.87	-1.25	96.97
8,433.00	0.56	197.10	8,337.38	402.10	463.11	613.29	0.82	0.06	-99.73
8,528.00	1.15	206.92	8,432.37	400.81	462.54	612.02	0.64	0.62	10.34
8,634.00	1.69	202.48	8,538.34	398.42	461.46	609.65	0.52	0.51	-4.19
8,717.00	1.81	201.85	8,621.30	396.07	460.51	607.40	0.15	0.14	-0.76
8,812.00	1.25	239.10	8,716.27	394.15	459.06	605.05	1.17	-0.59	39.21
8,906.00	1.13	255.22	8,810.25	393.38	457.28	603.20	0.38	-0.13	17.15
9,001.00	1.05	264.99	8,905.23	393.07	455.51	601.65	0.21	-0.08	10.28





Weatherford International Ltd





Company:

ANADARKO PETROLEUM CORP.

Project:

UINTAH COUNTY, UTAH (nad 27)

Site: Well: NBU 922-18 PAD IJNOP

Wellbore:

NBU 922-18J3S

Design:

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Database:

Well NBU 922-18J3S

KB @ 4887.00ft

KB @ 4887.00ft

True

Minimum Curvature

EDM 2003.21 Single User Db

s	u	rvev

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,098.00	0.81	245.60	9,002.22	392.71	454.00	600.26	0.40	-0.25	-19.99
9,190.00	0.81	244.47	9,094.21	392.16	452.82	599.01	0.02	0.00	-1.23
9,284.00	1,13	232.85	9,188.19	391.31	451.48	597.44	0.40	0.34	-12.36
9,378.00	1.19	222.10	9,282.17	390.03	450.09	595.55	0.24	0.06	-11.44
9,474.00	1.25	213.48	9,378.15	388.41	448.85	593.56	0.20	0.06	-8.98
9,569.00	1.63	209.10	9,473.12	386.37	447.62	591.29	0.42	0.40	-4.61
9,664.00	1.50	215.48	9,568.09	384.18	446.24	588.82	0.23	-0.14	6.72
9,759.00	1.56	214.73	9,663.05	382.10	444.78	586.37	0.07	0.06	-0.79
9,819.00	1.21	212.32	9,723.04	380.89	443.98	584.97	0.59	-0.58	-4.02
EXT TD.									
9,875.00	1.21	212.32	9,779.02	379.90	443.34	583.84	0.00	0.00	0.00

Survey Annotations

Measured	Vertical	Local Coor	dinates	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
9,875.00	9,779.02	379.90	443.34	EXT TD.

Checked By:	Approved By:	Date:	
· ·			

Greater Natural Buttes Unit



NBU 922-18J3S

RE-COMPLETIONS PROCEDURE

DATE:7/23/2010 AFE#:2047238

COMPLETIONS ENGINEER: Conner Staley, Denver, CO

(720)-929-6419 (Office)

SIGNATURE:

ENGINEERING MANAGER: JEFF DUFRESNE

SIGNATURE:

REMEMBER SAFETY FIRST!

Name: NBU 922-18J3S

Location: SW NW SE Sec. 18 T9S R22E

Uintah County, UT

Date: 7/23/10

ELEVATIONS: 4861 GL 4887 KB

TOTAL DEPTH: 9875 **PBTD:** 9798

SURFACE CASING: 9 5/8", 36# J-55 ST&C @ 2841' **PRODUCTION CASING:** 4 1/2", 11.6#, I-80 LT&C @ 9844'

Marker Joint 5048-5065'

TUBULAR PROPERTIES:

	BURST	COLLAPSE	DRIFT DIA.	CAPACITIES	
	(psi)	(psi)	(in.)	(bbl/ft)	(gal/ft)
2 3/8" 4.7# J-55	7,700	8,100	1.901"	0.00387	0.1624
tbg					
4 ½" 11.6# I-80	7780	6350	3.875"	0.0155	0.6528
(See above)					
2 3/8" by 4 ½"				0.0101	0.4227
Annulus					

TOPS:

1719' Green River

2006' Birds Nest

2361' Mahogany

4956' Wasatch

7663' Mesaverde

9875' Bottom of Mesaverde (TD)

CBL indicates good cement below 1000'

GENERAL:

- A minimum of **15** tanks (cleaned lined 500 bbl) of recycled water will be required. Note: Use biocide in tanks and the water needs to be at least 45°F at pump time.
- All perforation depths are from Halliburtons Induction-Density-Neutron log dated 7/13/09
- 4 fracturing stages required for coverage.
- Procedure calls for 5 CBP's (8000 psi).
- Calculate open perforations after each breakdown. If less than 60% of the perforations appear to be open, ball out with 15% HCl.
- Pump scale inhibitor at 3 gal/1000 during pad and sand ramp up to 1.25 ppg. Pump at 10 gal/1000 during flush.
- 30/50 mesh Ottawa sand, Slickwater frac.
- Maximum surface pressure **7000** psi.
- Flush volumes are the sum of slick water and acid used during displacement (include scale inhibitor as mentioned above). Stage acid and scale inhibitor if necessary to cover the next perforated interval.

- Call flush at 0 PPG @ inline densiometers. Slow to 5 bbl/min over last 10-20 bbls of flush. Flush to top perf.
- If distance between plug and top perf of previous stage is less than 50', it is considered to be tight spacing over flush stage by 5 bbls (from top perf)
- Service companies need to provide surface/production annulus pop-offs to be set for 1500 psi for each frac.
- Pump a **curable resin coated sand (such as SLC)** last 5,000# of all frac stages
- Tubing Currently Landed @~9302
- Originally completed on 9/15/09

Existing Perforations:

	Pei	rfs		
	Тор,	Bot.,		
Zone	ft.	ft	SPF	Holes
i				
MESAVERDE	7918	7924	3	18
MESAVERDE	7970	7974	2	8
MESAVERDE	8148	8152	4	16
MESAVERDE	8300	8304	3	12
MESAVERDE	8338	8340	3	6
MESAVERDE	8412	8414	3	6
MESAVERDE	8432	8436	4	16
MESAVERDE	8556	8558	3	6
MESAVERDE	8590	8594	3	12
MESAVERDE	8698	8700	4	8
MESAVERDE	8730	8734	4	16
MESAVERDE	8792	8794	3	6
MESAVERDE	8824	8826	3	6
MESAVERDE	8868	8872	3	12
MESAVERDE	8922	8924	4	8
MESAVERDE	8958	8960	4	8
MESAVERDE	9018	9020	4	8
MESAVERDE	9182	9184	3	6
MESAVERDE	9200	9202	4	8
MESAVERDE	9214	9220	3	18
MESAVERDE	9344	9346	3	6
MESAVERDE	9426	9430	3	12
MESAVERDE	9450	9452	4	8
MESAVERDE	9520	9524	4	16
MESAVERDE	9606	9610	3	12
MESAVERDE	9662	9664	4	8
MESAVERDE	9688	9690	4	8
MESAVERDE	9746	9750	3	12

PROCEDURE:

- 1. MIRU. Control well with recycled water and biocide as required. ND WH, NU BOP's and test.
- 2. TOOH with 2-3/8", 4.7#, J-55 (or N-80) tubing (currently landed at ~9302'). Visually inspect for scale and consider replacing if needed.
- 3. If the looks ok consider running a gauge ring to 7432 (50' below proposed CBP). Otherwise P/U a mill and C/O to 7432 (50' below proposed CBP).
- 4. Set 8000 psi CBP at ~ 7382'. Pressure test BOP and casing to 6000 psi. .
- 5. Perf the following with 3-3/8" gun, 23 gm, 0.36"hole:

Zone From To spf # of shots WASATCH 7324 7330 4 24 WASATCH 7350 7352 4 8

- 6. Breakdown perfs and establish injection rate (<u>include scale inhibitor in fluid</u>). Spot 250 gal of 15% HCl and let soak. Fracture as outlined in Stage 1 on attached listing. Underdisplace to ~7324' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 7. Set 8000 psi CBP at ~7134'. Perf the following 3-3/8" gun, 23 gm, 0.36"hole:

Zone From To spf # of shots WASATCH 7040 7046 4 24 WASATCH 7100 7104 4 16

- 8. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 2 on attached listing. Under-displace to ~7040' and trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 9. Set 8000 psi CBP at ~6176'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 6136 6146 4 40

- 10. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~6136' trickle 250gal 15% HCL w/ scale inhibitor in flush.
- 11. Set 8000 psi CBP at ~5400'. Perf the following with 3-3/8" gun, 23 gm, 0.36" hole:

Zone From To spf # of shots WASATCH 5246 5252 4 24 WASATCH 5368 5370 4 8

- 12. Breakdown perfs and establish injection rate. Fracture as outlined in Stage 3 on attached listing. Under-displace to ~5246' flush only with recycled water.
- 13. Set 8000 psi CBP at~5196'.
- 14. TIH with 3 7/8" mill, pump off sub, SN and tubing.

- 15. Mill ALL plugs and clean out to PBTD at 9798. Land tubing at \pm 9302' pump off bit and bit sub. This well WILL be commingled at this time.
- 16. Clean out well with foam and/or swabbing unit until steady flow has been established from recomplete.
- 17. RDMO

For design questions, please call Conner Staley, Denver, CO (720)-929-6419 (Office)

For field implementation questions, please call Jeff Samuels Vernal, UT 435-781-9770 (Office)

NOTES:

		Perfo	rations					
Stage	Zones	Top, ft	Bottom, ft	SPF	Holes	Frac	ture Covera	age
			·					_
1	WASATCH	7324	7330	4	24	7314	to	7333.5
	WASATCH	7350	7352	4	8	7349.5	to	7353.5
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				32	CBP DEPTH	7,134	
2	WASATCH	7040	7046	4	24	7030	to	7053
	WASATCH	7100	7104	4	16	7093	to	7108.5
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				40	CBP DEPTH	6,176	
	" or r oriorotage				,,,	95. 52	0,110	
3	WASATCH	6136	6146	4	40	6122.5	to	6167.5
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
					Look			
	# of Perfs/stage				40	CBP DEPTH	5,400	
	or ronorouge					95. 52	0,100	
4	WASATCH	5246	5252	4	24	5222.5	to	5254.5
	WASATCH	5368	5370	4	8	5353	to	5372
	WASATCH					1		
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	WASATCH							
	# of Perfs/stage				32	CBP DEPTH	5,196	
							-1	
	Totals				144			

urin	g Schedules										Swabbing Days	0	Enter Numb	er of swabbir	ng days h	ere for rec	ompletes			
e N	IBU 922-18J3S				1		Recomplete?	Y	1		Production Log	0	Enter 1 if ru	nning a Prod	uction Lo	a				
	ter Frac	Cop	to new	book			Pad?	Y	1		DEIT		Enter Numb							
					_		ACTS?	-	1		0111		enter mann	01 01 01 110						
							HOTO													Sca
		Per	fs			Rate	Fluid	Initial	Final	Fluid	Volume	Cum Vol	Volume	Cum Vol	Fluid	Sand	Sand	Cum. Sand	Footage from	
				1											% of					
e	Zone	Top, ft.	Bot., ft	SPF	Hole	s BPM	Туре	ppg	ppg		gals	gals	BBLs	BBLs	frac	% of frac	lbs	lbs	CBP to Flush	ga
٠,																				
	VASATCH	7324	7330				Pump-in test			Slickwater		0	0	0						
	VASATCH	7350	7352	4			ISIP and 5 min ISIP							l			_	l .		46
	VASATCH						Slickwater Pad			Slickwater	4,597	4,597	109		15.0%	0.0%	0		1	14
	VASATCH						Slickwater Ramp	0.25	1.5	Slickwater	15,324	19,921	365	474	50.0%	35.7%	13,408			-48
٧	VASATCH						Slickwater Ramp	1.5	3	Slickwater	10,727	30,648	255	730	35.0%	64.3%	24,135			0
٧	VASATCH					50	Flush (4-1/2)			Slickwater	4,781	35,429	114	844				37,543		0
٧	VASATCH						ISDP and 5 min ISDF	4		Slickwater										0
V	VASATCH																			0
V	VASATCH																	37,543		1 0
	VASATCH											35.429	114	844						-4
	VASATCH													"						15
- 1					Look											gal/md-ft	65,000	79.625	lbs sand/md-ft	
			# of Perf	i Interne		2								i lush depth	7324		BP depth		190	ì
			+ or P-em	Sarage	,	16.9	<< Above pump time	Audio N					-	l	7324		l depui	7,134	190	
2 1	MACATON	7040	7046		-		Pump-in test	(min)		Printmater		0	0	0						
	VASATCH				1 2	4 Vaneu 6 0	Pump-in test			Slickwater		0	۱ °	١ "						
	VASATCH	7100	7104	4	Ι'		ISIP and 5 min ISIP			Olivious Co.	9.451	9,451	225	225	45.500	0.50	0			2
	VASATCH						Slickwater Pad	0.05		Slickwater					15.0%	0.0%				
	VASATCH						Slickwater Ramp	0.25	1.5	Slickwater	31,502	40,953	750		50.0%	35.7%	27,564			9
	VASATCH						Slickwater Ramp	1.5	3	Slickwater	22,052	63,005	525	1,500	35.0%	64.3%	49,616			0
	VASATCH					50	Flush (4-1/2)			Slickwater	4,596	67,600	109	1,610				77,181		
	VASATCH						ISDP and 5 min ISDF	1		Slickwater										
٧	VASATCH																			0
٧	VASATCH																	77,181		0
٧	VASATCH											67,600	109	1,610						-40
٧	VASATCH																			16
					Look											gal/md.ft	45,000	55,125	lbs sand/md-ft	t
			# of Perf	fs/stage									F	ush depth	7040		CBP depth	6,176	864	
			# of Perf	fs/stage		32.2	<< Above pump time	(min)					F	lush depth	7040		CBP depth	6,176		
	VASATCH	6136	# of Perf	Ĺ	4	32.2 0 Varied	Pump-in test	(min)		Slickwater		0			7040		CBP depth	6,176		
	VASATCH VASATCH			Ĺ	4	32.2 0 Varied		(min)		Slickwater		0	0	0	7040		CBP depth	6,176		
٧				Ĺ	4	32.2 Varied	Pump-in test	(min)		Slickwater	15,076	15,076	359	359	7040		CBP depth	0	064	4:
٧	VASATCH			Ĺ	4	32.2 0 Varied 0 50	Pump-in test ISIP and 5 min ISIP	(min) 0.25	1.5		15,076 50,253		0	0		0.0%		0	064	4:
v v	VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp		1.5	Slickwater		15,076 65,329	359	0 359 1,555	15.0%	0.0% 35.7%	0 43,971	0 43,971	864	4: 15
0000	VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp	0.25		Slickwater Slickwater	50,253	15,076 65,329 100,506	359 1,197	359	15.0% 50.0%	0.0% 35.7%	0	0 43,971	864	4: 15
>>>>>	VASATCH VASATCH VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329	0 359 1,197 838	0 359 1,555 2,393	15.0% 50.0%	0.0% 35.7%	0 43,971	0 43,971 123,120	864	45 15 0
V V V V V	VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp	0.25 1.5		Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506	0 359 1,197 838	0 359 1,555 2,393	15.0% 50.0%	0.0% 35.7%	0 43,971	0 43,971 123,120	864	4 15 0
*****	VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506	0 359 1,197 838	0 359 1,555 2,393	15.0% 50.0%	0.0% 35.7%	0 43,971	0 43,971 123,120 123,120	864	4 15 0
00000000	VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488	15.0% 50.0% 35.0%	0.0% 35.7%	0 43,971	0 43,971 123,120	864	4: 15 0 0
000000000000000000000000000000000000000	VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506	0 359 1,197 838 95	0 359 1,555 2,393 2,488	15.0% 50.0% 35.0%	0.0% 35.7%	0 43,971	0 43,971 123,120 123,120	864	45 15 0 0 0 0
000000000	VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH VASATCH			Ĺ	4	32.2 0 Varied 0 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148	43,971 123,120 123,120	064	4 15 0 0 0 0 3 23
000000000	VASATCH	6136	6146	5 4	Look	32,2 0 Varied (50 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2)	0.25 1.5		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148	0 43,971 123,120 123,120 123,120	064	4 15 0 0 0 0 3 23
000000000	VASATCH	6136		5 4	Look	32.2 0 Varied 0 50 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF	0.25		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148	0 43,971 123,120 123,120 123,120	064	4 15 0 0 0 0 3 23
V V V V V V	VASATCH	6136	6148 #of Perf	i 4	Look 4	32.2 0 Varied 0 50 50 50	Pump-in test ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF	0.25		Slickwater Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148	0 43,971 123,120 123,120 123,120	064	4 15 0 0 0 0 3 23
V V V V V V V V V V V V V V V V V V V	VASATCH	6136 5246	6146 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50	Pump-in test ISIP and 5 min ISIP Stickwater Pad Stickwater Ramp ISIOP and 5 min ISOP «< Above pump time Pump-in test	0.25		Slickwater Slickwater Slickwater Slickwater	50,253 35,177	15,076 65,329 100,506 104,512	0 359 1,197 838 95	0 359 1,555 2,393 2,488 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148	0 43,971 123,120 123,120 123,120	064	4: 15 0 0 0 0 0 3:
4 0	VASATCH	6136	6148 #of Perf	is 4	Look 4	32.2 0 Varied 50 50 50 50 50	Pump-in teet ISIP and 5 min ISIP Stickwater Pad Stickwater Ramp Stickwater Ramp Flush (4-1/2) ISDP and 5 min ISDP Above pump time Pump-in teet ISIP and 5 min ISIP	0.25		Slickwater Slickwater Slickwater Slickwater Slickwater	50,253 35,177 4,006	15,076 65,329 100,506 104,512 104,512	0 359 1,197 838 95 95	0 359 1,555 2,393 2,488 2,488	15.0% 50.0% 35.0%	0.0% 35.7% 64.3%	0 43,971 79,148 35,000 35,000	43,971 123,120 123,120 123,120 123,120 42,875	064	4 15 0 0 0 0 0 3 23
4 9 9	VASATCH	6136 5246	6146 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 6 49.8 4 Varied 8 (50	Pump-in teet ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2) ISOP and 5 min ISOF As Above pump time Pump-in test ISIP and 5 min ISIP Slickwater Pad	0.25 1.5	3	Slickwater Slickwater Slickwater Slickwater Slickwater Slickwater	50,253 35,177 4,006	15,076 65,329 100,506 104,512 104,512 0 6,590	0 359 1,197 838 95 95	0 359 1,555 2,393 2,488 2,488 lush depth 0	15.0% 50.0% 35.0%	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 0	43,971 123,120 123,120 123,120 123,120 42,875	864 Ibs sand/md fi	4 15 () () () () () () () () () () () () ()
4 0 0	VASATCH	6136 5246	6146 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Vaned 8 0 50	Pump-in teet ISIP and 5 min ISIP Slickwater Pad Slickwater Ramp Flush (4-1/2) ISDP and 5 min ISDP «< Above pump time Pump-in teet ISIP and 5 min ISIP Slickwater Pad Slickwater Pad Slickwater Pad Slickwater Pad	0.25 1.5 (min)	1.5	Slickwater Slickwater Slickwater Slickwater Slickwater Slickwater Slickwater	50,253 35,177 4,006	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555	0 359 1,197 838 95 95 F	0 359 1,555 2,393 2,488 2,488 ush depth 0 157 680	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	43,971 123,120 123,120 123,120 123,120 42,875 5,400	864	4: 15 0 0 0 0 0 3: 23
4 0 0	VASATCH	6136 5246	6146 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet iSIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2) ISOP and 5 min ISOF «« Above pump time Pump-in teet ISIP and 5 min ISIP Slickwater Pad Slickwater Pad Slickwater Pad	0.25 1.5	3	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930	0 359 1,197 838 95 95 F 0 0 157 523 366	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046	15.0% 50.0% 35.0%	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 0	0 0 43,971 123,120 123,120 123,120 42,875 5,400	864	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	WASATCH	6136 5246	6146 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555	0 359 1,197 838 95 95 F	0 359 1,555 2,393 2,488 2,488 ush depth 0 157 680	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	43,971 123,120 123,120 123,120 123,120 42,875 5,400	864	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246	6148 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet iSIP and 5 min ISIP Slickwater Pad Slickwater Ramp Slickwater Ramp Flush (4-1/2) ISOP and 5 min ISOF «« Above pump time Pump-in teet ISIP and 5 min ISIP Slickwater Pad Slickwater Pad Slickwater Pad	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930	0 359 1,197 838 95 95 F 0 0 157 523 366	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	0 0 43,971 123,120 123,120 123,120 42,875 5,400	864	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	WASATCH	6136 5246	6148 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930	0 359 1,197 838 95 95 F 0 0 157 523 366	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	0 43,971 123,120 123,120 123,120 42,876 5,400 0 19,219 53,814	864 Ibs sand/md-ft 736	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246	6148 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 157 523 366 82	0 359 1,555 2,393 2,488 2,488 ush depth 0 1,576 880 1,046 1,127	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	0 0 43,971 123,120 123,120 123,120 42,875 5,400	864 Ibs sand/md-ft 736	44 15 () () () () () () () () () () () () ()
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246	6148 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930	0 359 1,197 838 95 95 F 0 0 157 523 366	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft	35,000 35,000 36,000 37,000	0 43,971 123,120 123,120 123,120 42,876 5,400 0 19,219 53,814	864 Ibs sand/md-ft 736	4 15 () () () () () () () () () (
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246	6148 # of Perf 5252	is 4	Look 4	32.2 0 Varied 50 50 50 50 50 49.8 4 Varied 8 0 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 157 523 366 82	0 359 1,555 2,393 2,488 2,488 ush depth 0 1,576 880 1,046 1,127	15.0% 50.0% 35.0% 6136	0.0% 35.7% 64.3% gal/md-ft (0 43,971 79,148 35,000 CBP depth 0 19,219 34,595	0 43,971 123,120 123,120 123,120 42,875 5,400 0 19,219 53,814 53,814	864 Ibs sand/md fl	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246 5368	6146 # of Pert 5252 5370		Look 4	32.2 0 Varied 50 50 50 50 6 49.8 4 Varied 8 50 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 (min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 157 523 366 82	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046 1,127	15.0% 50.0% 35.0% 6136 15.0% 50.0%	9al/md-ft	35,000 CBP depth	0 43,971 123,120 123,120 123,120 123,120 42,876 5,400	lbs sand/md fi	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	WASATCH	6136 5246 5368	6148 # of Perf 5252		Look 4	322 0 Vaned 50 50 55 55 56 4 Vaned 4 Vaned 8 (55 55 56	Pump-in teet (SP) and 5 min SIP) Slickwater Pand Slickwater Pand Slickwater Ramp Slickwater Ramp Flush (4-1/2) (SDP and 5 min ISDF AS and 5 min ISDF Slickwater Pand Slickwa	0.25 1.5 ((min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 157 523 366 82	0 359 1,555 2,393 2,488 2,488 ush depth 0 1,576 880 1,046 1,127	15.0% 50.0% 35.0% 6136 15.0% 50.0%	9al/md-ft	0 43,971 79,148 35,000 CBP depth 0 19,219 34,595	0 43,971 123,120 123,120 123,120 123,120 42,876 5,400	864 Ibs sand/md fl	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 0000000000000000000000000000000000000	WASATCH	6136 5246 5368	6146 # of Pert 5252 5370		Look 4	322 0 Varied 50 50 50 50 50 50 50 50 50 50 50 50 50	Pump-in teet (EP) and 5 min SIP) Sickwater Pamp Sickwater Ramp Sickwater Ramp Flush (4-1/2) ISDP and 5 min ISDF AS Above pump time Pump-in test ISDP and 5 min ISDF Sickwater Pam Sickwater Pam Sickwater Pam Sickwater Ramp	0.25 1.5 ((min)	1.5	Slickwater	6,590 21,986 6,590 21,986 3,425	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 0 1577 523 366 82	0 359 1,555 2,393 2,488 2,488 2,488 10sh depth 0 157 680 1,046 1,127 1,127	15.0% 50.0% 35.0% 6136 15.0% 50.0%	0.0% 35.7% 64.3% gal/md-ft (0.0% 35.7% 64.3%	35,000 CBP depth	0 43,971 123,120 123,120 123,120 123,120 42,875 5,400 0 19,219 53,814 53,814 61,250 5,196	lbs sand/md fi	4: 15: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4 0000000000000000000000000000000000000	WASATCH	6136 5246 5368	6146 # of Pert 5252 5370		Look 4	322 0 Varied 50 50 50 50 50 50 50 50 50 50 50 50 50	Pump-in teet (SP) and 5 min SIP) Slickwater Pand Slickwater Pand Slickwater Ramp Slickwater Ramp Flush (4-1/2) (SDP and 5 min ISDF AS and 5 min ISDF Slickwater Pand Slickwa	0.25 1.5 ((min)	1.5	Slickwater	50,253 35,177 4,006 6,590 21,965 15,376	15,076 65,329 100,506 104,512 104,512 0 6,590 28,555 43,930 47,355	0 359 1,197 838 95 95 F 0 157 523 366 82 82	0 359 1,555 2,393 2,488 2,488 0 157 680 1,046 1,127	15.0% 50.0% 35.0% 6136 15.0% 50.0%	0.0% 35.7% 64.3% gal/md-ft (0.0% 35.7% 64.3%	35,000 CBP depth	0 43,971 123,120 123,120 123,120 123,120 42,875 5,400 0 19,219 53,814 53,814 61,250 5,196	lbs sand/md fi	4 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461
SUNDF	RY NOTICES AND REPORTS OF	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen exis igged wells, or to drill horizontal laterals. Use A	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES	
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18J3S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047398420000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N treet, Suite 600, Denver, CO, 80217 3779	IUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1482 FSL 2523 FEL QTR/QTR, SECTION, TOWNSHI	P, RANGE, MERIDIAN:		COUNTY: UINTAH STATE:
	Township: 09.0S Range: 22.0E Meridian: S		UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	IATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start: 8/5/2010	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME
6/3/2010	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	□ NEW CONSTRUCTION
·	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	L TEMPORARY ABANDON
	☐ TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION
	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:
THE OPERATOR REQ WELL LOCATION. THE FORMATION. THE O THE NEWLY WASATCH	MPLETED OPERATIONS. Clearly show all pertined UESTS AUTHORIZATION TO RECOMENTATION TO RECOMENTATION TO RECOMENTATION TO RECOMENTATION REQUESTS AUTHORIZATION THE EXISTING MESAVER OF THE ATTACHED RECOMPLETION	OMPLETE THE SUBJECT OMPLETE THE WASATCH ATION TO COMMINGLE DE FORMATION. PLEAS PROCEDURE.	Accepted by the Utah Division of E Oil, Gas and Mining hte: August 19, 2010
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 8/3/2010	



The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43047398420000 Authorization: Board Cause No. 173-14.

> Appropried by the **Utah Division of** Oil, Gas and Mining

Sundry Number: 16906 API Well Number: 43047398420000

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0461
SUNDF	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	sals to drill new wells, significantly deepen e ugged wells, or to drill horizontal laterals. Us		7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: NBU 922-18J3S
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047398420000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONI Street, Suite 600, Denver, CO, 80217 3779	E NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1482 FSL 2523 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI	IP, RANGE, MERIDIAN: Township: 09.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
THE OPERATOR HAWELL. THE OPERATOR HAS COUNTY THE EXISTIN PLACED ON PRODUCT	□ ACIDIZE □ CHANGE TO PREVIOUS PLANS □ CHANGE WELL STATUS □ DEEPEN □ OPERATOR CHANGE ✓ PRODUCTION START OR RESUME □ REPERFORATE CURRENT FORMATION □ TUBING REPAIR □ WATER SHUTOFF □ WILDCAT WELL DETERMINATION DMPLETED OPERATIONS. Clearly show all pertically performed by the per	TION ON THE SUBJECT SATCH FORMATION. THE TCH FORMATION, ALONG HE SUBJECT WELL WAS UNDER THE CHRONOLOGION	accepted by the Itah Division of I. Gas and Mining
NAME (PLEASE PRINT) Sheila Wopsock	PHONE NUMBER 435 781-7024	TITLE Regulatory Analyst	
SIGNATURE N/A		DATE 7/25/2011	

Form 3160-4 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

Lease Serial No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

										-	-	.,			J1U461		
la. Type of		Oil Well	_		Dr.		Other							5. If	Indian, Al	ottee	or Tribe Name
o. Type of	f Completion	Othe	lew Well er	U Wo	ork Over		Deepen		Plug	g Back	⊠ Difi	. Resv			nit or CA A		nent Name and No.
2. Name of KERR	Operator MCGEE OII	. & GAS	ONSHORE	,lMail:	C gina.be	ontact:	GINA T. anadarko	BECk .com	KER		~~~		8		ease Name IBU 922-1		
3. Address		73779					3a.	Phon	ie No 9-929	o. (include 9-6086	e area co	de)	9		PI Well No	-	43-047-39842
4. Location	of Well (Re	port locati	on clearly as	nd in ac	cordance	with F	ederal rec	luirem	ents)*							Exploratory
At surfa	ce NWSE	1482FS	L 2523FEL	40.032	2810 N I	Lat, 10	9.482320) W Lo	on				-		ATURAL Sec. T. R		ES r Block and Survey
At top p	rod interval	reported b	elow NW	SE 189	0FSL 2	052FE	L							0	r Area Se	c 18 7	T9S R22E Mer SLB
At total	depth NW	/SE 1862	FSL 2080F	EL									1		County or P IINTAH	arish	13. State UT
14. Date Sp 12/13/2				ate T.D //12/200	. Reache 09	:d			D &	Complet A 3/2011	ed Ready to	Prod	1, 1	17. I		DF, K 61 GL	B, RT, GL)*
18. Total D	epth:	MD TVD	9875 9779		19. Pl	ug Bacl	k T.D.:	MI TV		97 97		20). Depth	Bri	dge Plug Se	et:	MD TVD
21. Type El BHV-AC	lectric & Oth CRT-SDL-D	er Mechai SN-TRIP	nical Logs R LE COMBO				Hy.	_			Wa	s DS7	l cored? Γrun? nal Surve		🔀 No	🔲 Ye	es (Submit analysis) es (Submit analysis)
23. Casing an	d Liner Rec	ord (Repo	rt all strings		-			W. Majorisherow.			DII	CCLIOI	iai Suive	зу <u>г</u>	L 140	X Ye	s (Submit analysis)
Hole Size	Size/G	rade	Wt. (#/ft.)	To (M	- 1	Botton (MD)	1 -	Ceme Depth	nter		f Sks. & of Cemen		Slurry V (BBL)	1	Cement 7	Гор*	Amount Pulled
20.000	PARTITION OF THE PARTIT	000 STL	36.7				40			<u></u>	***************************************	28	- Allender				
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24. Tubing	Record			<u> </u>			<u> </u>				****************				****		1
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2.375		7082															
25. Producir	rmation		Тор		Botto		26. Perfor			-	·····		7.	Τ.,			
A)	WASA	АТСН	100	5246		7362	I	eriora	nea ,	interval 5246 Te	0 7362	2	Size 0.360	-	lo. Holes	OPE	Perf. Status
В)															Ü)	
<u>C)</u> D)	The sales of the s					****	1470-140 Hoberton	-	50 00000					L			
27. Acid, Fr	acture, Treat	ment, Cen	nent Squeeze	e, Etc.				-		74+000 000000000000	***************************************			<u>L.</u>			Maria da de la companio de la compa
	Depth Interva	al								nount and	Type of	Mate	rial			RE	CEIVED
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28. Producti	on - Interval	A					W.C.	No. of the second		**************************************			***		DIV	OF	OIL, GAS & MINING
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MC		Water BBL		Dil Gra Corr. A		Gas Grav	rity	Pro	ductio	n Method	***************************************	
07/23/2011	08/09/2011	24		29.0		2005.0	16.0					,			FLOW	S FRO	OM WELL
Size	Tbg. Press. Flwg. 326 SI	Csg. Press. 349.0	24 Hr. Rate	Oil BBL 29	Gas MC		Water BBL 16		Gas:Oi Ratio	1	Well	Status	1				
28a. Product		1 B														-	
	Test Date	Hours Tested	Test Production	Oil BBL	Gas MC		Water BBL		Oil Gra Corr. A		Gas Grav	ity	Pro	ductio	n Method	****	
Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MC		Water BBL		as:Oi	[Well	Status				*****	
(See Instruction ELECTRON	IIC SUBMIS	SSION #1	litional data 16261 VER TOR-SUI	IFIED :	BY THE	BLM	WELL I	NFOR R-SU	IMA JBN	TION SY	STEM	ER	ATOR-	-su	BMITT	ED **	k

28h. Prod	uction - Interv	al C							PO-MODELO CARROLLE AND STATE OF THE STATE OF	Manager and the second		**************************************
Date First	Test	Hours	Test	Oil	Gas	Water	Oil Gravity	Gas		Due de este a Se el el		-
Produced	Date	Tested	Production	BBL	MCF	BBL	Corr. API	Gravi	ty	Production Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well	Status			
28c. Prod	uction - Interv	al D		***************************************			<u> </u>	 				
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravi	ty	Production Method		,
Choke Size	Tbg. Press. Flwg. SI	Csg, Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well	Status	<u> </u>		7.7.7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4
29. Dispo	risposition of Gas(Sold, used for fuel, vented, etc OLD					***************************************		THE RESERVE OF THE PERSON NAMED IN				Van saarii; iii saarii saar
	ary of Porous	Zones (I	nclude Aquife	rs):					31. For	mation (Log) Ma	rkers	
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	Formation	Ì	Тор	Bottom		Description	s, Contents, etc).		Name		Тор
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TANK STANSON												
32. Additi	ional remarks	include p	olugging proce	edure): tion history	and nerf	foration report.		**************************************	-			
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	enclosed attacectrical/Mecha		rs (1 firll set re	a'd)		2. Geologic R	ano ut	2	DOT D		4 500 11	
	ndry Notice fo	_				6. Core Analy	•		DST Rep Other:	ort	4. Direction	al Survey
				- 1701-1800-1-100-1								
34. I herel	by certify that	the foreg								records (see attac	hed instruction	ns):
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Name	(please print)	GINA T.	BECKER		******************	al literatura in companyon any anno any	Title R	EGULATO	ORY ANA	ALYST		
C:	hima	/Eloates	nia Cuhu-!!	on)			-	2/06/25				
Signat	ran 6	(⊏iectroi	nic Submissi	on)			Date <u>08</u>	8/26/2011	NATION OF THE PARTY OF THE PART			
Tid. 10 T	10 C C - 11	1001 1	TM - 40 TT C	a a	212	-, . <u>-</u>						
of the Uni	ited States any	false, fic	titious or frad	U. Section 1 ulent statem	212, make ents or rep	e it a crime for an presentations as t	iy person know o any matter w	vingly and v vithin its jur	willfully t risdiction.	o make to any de	partment or ag	gency

US ROCKIES REGION **Operation Summary Report** Well: NBU 922-18J3S [yellow****) Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Project: UTAH-UINTAH Site: NBU 922-18K PAD Rig Name No: Event: RECOMPL/RESEREVEADD Start Date: 7/12/2011 End Date: 7/22/2011 Active Datum: RKB @4,887,00ft (above Mean Sea UWI: NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,482.00/E/0/2,523.00/0/0 Level) Date Time Duration Phase Code Sub P/U MD From Operation Start-End (hr) Code (ft) 7:00 - 18:30 7/12/2011 11.50 COMP 30 O Α 7AM [DAY 1] JSA--R/U RIG, NDWH, NUBOP. SCANNING & L/D TBG. MIRU, SPOT EQUIPMENT. FTP=130#, FCP130#. RETREIVE PLUNGER. EOT @ 9302'. KILL TBG W/ 30 BBLS TMAC, NDWH, NUBOP, R/U FLOOR & TBG EQUIPMENT. UNLAND TBG. L/D HANGER. BAD THREADS IN FMC HANGER, ALSO LIGHT SCALE IN THREADS. CALL FMC FOR NEW HANGER & DELIVER TO LOCATION IN AM. MIRU SCAN TECH. POOH SCANNINING 2-3/8" I-80 TBG & LAYING DOWN ON SILLS ON LOCATION. PULLING 75K COMING OFF BTM. KILL TBG W/ 40 BBLS 3/4 OUT. TOTAL OF 293 JTS. L/D 7 JTS YELLOW BAND THAT NEEDS ID RATTELED & CLEANED OUT, & 4 JTS RED BND W/ UP TO 28% WALL LOSS. - MEDIUM SCALE ON OD ON BTM 20 JTS +-. PUMPED 70 BBLS TOTAL. 20-70 NORM READINGS ON TBG. LIGHT SCALE ID OFF & ON THRU OUT STRING. DRIFT ALL W/ 1.90 DRIFT. MIRU C.H.S. RIH W/ 4.5" GAUGE RING TO 7440. SNUG SPOT FROM 5250' TO 5850', RIH W/ 4.5" HALL 10K CBP & SET @ 7392'. POOH & L/D W.L. TOOLS. RDMO C.H.S. 6:30 PM SWI-SDFN. 7/13/2011 7:00 - 10:00 3.00 COMP 30 7AM [DAY 2] JSA-- NDWH, NUFV, P.T., R/D RIG. SICP=0#. NDBOP, NUFV. FILL CSG & P.T. TO 1000# FOR 1 HR., 0# LOST IN 1 HR. RDMO. MOVE OVER TO NEXT RECOMPLETE ON 18K PAD. NBU 922-18135. PREP TO FRAC NEXT WEEK. 7/15/2011 6:45 - 7:00 0.25 COMP 48 P HSM PRESS ON FRAC VALVES 7:00 - 10:00 3.00 COMP 33 RU B& C QUICK TEST FILL SURFACE AND WELL TEST CSG & FRAC VALVES TO 1000 PSI FOR 15 MIN LOST 14 PSI TEST CSG & FRAC VALVES TO 3500 PSI FOR 15

P

MIN LOST 36 PSI

MIM LOST 59 PSI

TEST CSG & FRAC VALVES TO 6200 PSI FOR 30

HSM HIGH PRESSURE AND THUNDER STORMS

8/16/2011

7/20/2011

1:01:38PM

6:45 - 7:00

0.25

COMP

48

				US	ROCI	KIES RE	GION			
			C				ry Repor	t		
Well: NBU 922	2-18J3S [yellow****)	Spud C	onductor	: 12/13/2	2008	Spud Date: 1/	/12/2009		
Project: UTAH	I-UINTAH		Site: NE	BU 922-1	8K PAD			Rig Name No:		
Event: RECO	MPL/RESEREVEAD	DD	Start Da	ite: 7/12/	2011			End Date: 7/22/2011		
Active Datum: Level)	RKB @4,887.00ft (above Mean	Sea	UWI: N	W/SE/0/	9/S/22/E/	18/0/0/6/PM/S	/1,482.00/E/0/2,523.00/0/0		
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation		
	7:00 - 18:00	11.00	COMP	36	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		V	PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLI SIZE. 90 DEG PHASING. AS PER DESIGN. POOH. X-OVER FOR FRAC CREW		
								FRAC STG 1) WHP 372 PSI, BRK 2905 PSI @ 4-3 BPM. ISIP 1801 PSI, FG .68.		
								PUMP 100 BBLS @ 38.5 BPM @ 5594 PSI = 61% HOLES OPEN.		
								ISIP 2465 PSI, FG .77, NPI 664 PSI. MP 5988 PSI, MR 48.1 BPM, AP 5117 PSI, AR 39.7 BPM.		
								PMP 1255 BBLS SW & 18,040 LBS OF 30/50 SND NO RESIN SND TOTAL PROP 00,000 LBS		
								X-OVER FOR W L (HAD TO FLUSH 970# SAND AFTER 20 MIN DUE TO COMPUTER PROBLEMS)		
								PERF STG 2) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7134' P/U PERF AS PER PERF DESIGN. POOH.X-OVER FOR FRAC CREW		
								FRAC STG 2) WHP 1443 PSI, BRK 1812 PSI @ 3.7 BPM. ISIP 1532 PSI, FG .66		
							•	PUMP 100 BBLS @ 50.4 BPM @ 4209 PSI = 95% HOLES OPEN. ISIP 1850 PSI, FG .70, NPI 318 PSI.		
								MP 5363 PSI, MR 50.0 BPM, AP 4241 PSI, AR 50.0 BPM,		
								PMP 749 BBLS SW & 22,254 LBS OF 30/50 SND & NO RESIN SND TOTAL PROP 22,254 X-OVER TO W L		
								PERF STG 3) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6180' P/U PERF AS PER PERF DESIGN. POOH X-OVER FOR FRAC CREW		
								FRAC STG 3) WHP 155 PSI, BRK 1660 PSI @ 4.5 BPM. ISIP 1155 PSI, FG .63. PUMP 100 BBLS @ 50.1 BPM @ 4799 PSI = 71% HOI ES OPEN		

FRAC STG 3) WHP 155 PSI, BRK 1660 PSI @ 4.5 BPM. ISIP 1155 PSI, FG .63. PUMP 100 BBLS @ 50.1 BPM @ 4799 PSI = 71% HOLES OPEN. ISIP 1418 PSI, FG .67, NPI 263 PSI. MP 5556 PSI, MR 51.9 BPM, AP 5014 PSI, AR 49.0 BPM, PMP 1373 BBLS SW & 45,842 LBS OF 30/50 SND & NO RESIN SND.TOTAL PROP 45,842 LBS X-OVER FOR W L

PERF STG 4) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 5400' P/U PERF AS PER PERF DESIGN. POOH.X-OVER FOR FRAC CREW

FRAC STG 4) WHP 185 PSI, BRK 14650 PSI @ 3.6 BPM. ISIP 547 PSI, FG .54.
PUMP 100 BBLS @ 47.6 BPM @ 5277 PSI = 60% HOLES OPEN.
ISIP 1631 PSI, FG .75, NPI 1084 PSI.
MP 5311 PSI, MR 49.8 BPM, AP 4970 PSI, AR 49.3 BPM,
PMP 668 BBLS SW & 23,558 LBS OF 30/50 SND & NO RESIN SND.TOTAL PROP 23,558 LBS
X-OVER TO W L

US ROCKIES REGION Operation Summary Report Well: NBU 922-18J3S [yellow****) Spud Conductor: 12/13/2008 Spud Date: 1/12/2009 Project: UTAH-UINTAH Site: NBU 922-18K PAD Rig Name No: Event: RECOMPL/RESEREVEADD Start Date: 7/12/2011 End Date: 7/22/2011 Active Datum: RKB @4,887.00ft (above Mean Sea UWI: NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,482.00/E/0/2,523.00/0/0 Level) Date Time Duration Phase Code Sub P/U MD From Operation Start-End (hr) Code (ft) PU & RIH W 4 1/2 CBP SET KILL PLUG @ 5196 RD W L SWI TOTAL SAND = 109,694# TOTAL TOTAL CLFL =4044 TOTAL SCALE = 530 GAL TOTAL BIO = 83 7/21/2011 7:00 - 17:00 10.00 COMP 30 Α 7AM [DAY 5] JSA-- R/U RIG, P/U TBG, DRIFTS. MIRU, SPOT EQUIPMENT. NDWH, NUBOP, R/U FLOOR & TBG EQUIPMENT. P/U 3-7/8" MILL, SLIDING SLEEVE SUB & 2-3/8" YELL BND N-80 TBG. [SLM & DRIFTED] CIRCULATE TBG EVERY 500' WITH TMAC. EOT

@ 5160'. R/U SWVL & RIG PUMP. ESTABLISH CIRCULATION. P.T. BOP TO 3000#. LOST 0# IN

4PM SWI-SDFN. PREP TO D/O PLUGS IN AM.

30 MINUTES.

8/16/2011

1:01:38PM

US ROCKIES REGION

	Operation Summary Repo	rt
Well: NBU 922-18J3S [yellow****)	Spud Conductor: 12/13/2008 Spud Date:	1/12/2009
Project: UTAH-UINTAH	Site: NBU 922-18K PAD	Rig Name No:
Event: RECOMPL/RESEREVEADD	Start Date: 7/12/2011	End Date: 7/22/2011
Active Datum: RKB @4,887.00ft (above Mean Level)		/S/1,482.00/E/0/2,523.00/0/0
Date Time Duration Start-End (hr)	Phase Code Sub P/U MD From Code (ft)	Operation
7/22/2011 7:00 -	COMP 30 P	7AM [DAY 6] JSA P/U TBG, NDBOP, NUWH, FOAM UNITS, SLK LINE.
		MIRU WTFRD FOAM / NITROGEN UNIT. STAND-BY.
		EOT @ 5160'. SITP-0#, SICP=0#. ESTABLISH CIRCULATION. C/O 10' SAND TO CBP#1.
		[DRLG CBP#1] @ 5196'. D/O HALL 8K CBP IN 8 MIN. 0# INCREASE. RIH & C/O 45' SAND TO CBP#2. FCP=50#.
		[DRLG CBP#2] @ 5400'. D/O HALL 8K CBP IN 7 MIN. 0# INCREASE. RIH & C/O 30' SAND TO CBP#3. FCP=50#.
		[DRLG CBP#3] @ 6180'. D/O HALL 8K CBCP IN 15 MIN. 0# INCREASE. RIH & C/O 30' SAND TO CBP#4. FCP=50#.
		[DRLG CBP#4] @ 7134'. D/O HALL 8K CBP IN 12 MIN. 0# INCREASE. RIH, TAG SAND @ 7362'. C/O 10' SAND TO 7372'. CIRC WELL CLN. R/D SWVL. POOH & L/D 10 JTS ON SILLS ON LOCATION. LAND TBG ON HANGER W/ 223 JTS 2-3/8" L-80 YELL BND TBG. EOT @ 7081.70'. R/D FLOOR & TBG EQUIPMENT. NDBOP, NUWH. ISOLATION PLUG STILL @ 7392'. WASATCH ONLY PRODUCING.
		MIRU DELSCO SLICK LINE TRUCK. RIH TO RETRV PLUGGED SLEEVE @ 7081'. STACK OUT @ 6150'. SCALE? POOH & L/D SLK LINE TOOLS. FOUND BENT GUIDE ON TOOL. RDMO DELSCO. CALL CUTTERS TO PERF TBG.
		MIRU CUTTERS. RIH W/ 6' x 1-11/16" PERF GUNS. SHOOT 24, 1/4" HOLES @ 7071-77'. POOH. RDMO CUTTERS.
		3 PM TURN WELL OVER TO DELSCO FBC & APC MAINT CREW. CREWS ATTEMPTING TO SELL GAS. FTP=250#, SICP=500# ON OPEN CHOKE TO FBT. UNLOADING A BUNCH OF WATER. TRYING TO GET HALL 9000 TO OPERATE. FLOW TESTER WILL SHUT IN WELL, IF NEEDED TO BUILD PSI. THEN OPEN TO SALES ON 20/64 CHOKE. LTR=3500 BBLS.
		R/D RIG & FOAM / N2 UNIT. MOVE OVER & R/U ON NBU 922-1813S. NDWH, NUBOP. R/U FLOOR & TBG EQUIPMENT.
		5 PM SDF-WE. PREP TO D/O 3 CBP'S ON MONDAY 7/25/11
		282 JTS ON LOCATION ON SILLS 223 JTS LANDED 56 JTS ON SILLS, 3 WOULD NOT DRIFT. LOADED ALL TBG ON FLOAT WHEN FINISHED D/O PLIUGS, SO PROD COULD HOOK UP CHEMICAL BULK TANKS.
		305 TOTAL JTS 2-3/8" L-80 YELL BND ON TRAILER

	0		S ROCKIES	REGION mary Report	
Well: NBU 922-18J3S [yellow****)			: 12/13/2008	Spud Date: 1/	
Project: UTAH-UINTAH	Site: NB	SU 922-1	8K PAD		Rig Name No:
Event: RECOMPL/RESEREVEADD	Start Da	ite: 7/12/	2011		End Date: 7/22/2011
Active Datum: RKB @4,887.00ft (ab- Level)	ove Mean Sea	UWI: N	W/SE/0/9/S/2	2/E/18/0/0/6/PM/S/	1,482.00/E/0/2,523.00/0/0
Date Time [Ouration Phase (hr)	Code	Sub P/U Code	J MD From (ft)	Operation
7/23/2011 7:00 -		33	A		ON CORNER OF LOCATION TO USE TO D/O ISOLATION PLUGS & LAND TBG ON 3 OF THE RECOMPLETE WELLS 3 JTS DID NOT DRIFT & ARE MARKED. 100 OF THE JTS CAME FROM B&C / APC YARD AND THE REST CAME OUT OF THE WELLS ON 18K PAD. 7 AM FLBK REPORT: CP 2000#, TP OPEN#, NA/64 CK, NA BWPH, NA SAND, NA GAS TTL BBLS RECOVERED: 772 BBLS LEFT TO RECOVER: 3272
7/24/2011 7:00 -		33	A		7 AM FLBK REPORT: CP 1500#, TP 1150#, 20/64" CK, 10 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 1072 BBLS LEFT TO RECOVER: 2972
7/25/2011 7:00 -		33	Α		7 AM FLBK REPORT: CP 1500#, TP 1350#, 20/64" CK, 5 BWPH, LIGHT SAND, - GAS TTL BBLS RECOVERED: 1231 BBLS LEFT TO RECOVER: 2813

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well Information

Well	NBU 922-18J3S [yellow****)		
Common Name	NBU 922-18J3S		
Well Name	NBU 922-18J3S	Wellbore No.	ОН
Report No.	1	Report Date	7/12/2011
Project	UTAH-UINTAH	Site	NBU 922-18K PAD
Rig Name/No.		Event	RECOMPL/RESEREVEADD
Start Date	7/12/2011	End Date	7/22/2011
Spud Date	1/12/2009	Active Datum	RKB @4,887.00ft (above Mean Sea Level)
UWI	NW/SE/0/9/S/22/E/18/0/0/6/PM/S/1,482.00/E/0/2,523.00/0/0		

1.3 General

Contractor		Job Method	PERFORATE	Supervisor	
Perforated Assembly	PRODUCTION CASING	Conveyed Method	WIRELINE		

1.4 Initial Conditions

1.5 Summary

Fluid Type		Fluid Density	Gross Interval	5,246.0 (ft)-7,362.0 (ft)	Start Date/Time	7/18/2011	12:00AM
Surface Press		Estimate Res Press	No. of Intervals	7	•		12:00AM
TVD Fluid Top		Fluid Head	Total Shots	96	Net Perforation Interval		24.00 (ft)
Hydrostatic Press		Press Difference	Avg Shot Density	4.00 (shot/ft)	Final Surface Pressure		
Balance Cond	NEUTRAL				Final Press Date	 	

2 Intervals

2.1 Perforated Interval

Reservoir (ft)	CL-T MD Top I S (ft) (ft)	(ft)	电电话经验 医皮肤性	Misfires/ Diamete Carr Type Add. Shot r (in)	Carr Manuf Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Reason Weight (gram)	Misrun
12:00AMWASATCH/	5,246.0	5,250.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO	
		2						N	

2.1 Perforated Interval (Continued)

·불하는 경험이 있는 것은 이 모든 사람들이다. 소개 방향하는 사용하는 수 있는 사람은 전에 가는 네트를 받았다.	CL@ CCL-T MD Top (ft) S (ft) (ft)	(ft) D	Shot Misfires/ Density Add. Shot shot/ft)	Diamete Carr Type /Carr Manuf r (in)	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Reason Weight (gram)	Misrun
12:00AMWASATCH/	5,368.0	5,370.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	
12:00AMWASATCH/	6,144.0	6,150.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	
12:00AMWASATCH/	7,040.0	7,044.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	
12:00AMWASATCH/	7,102.0	7,104.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	
12:00AMWASATCH/	7,324.0	7,328.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	
12:00AMWASATCH/	7,360.0	7,362.0	4.00	0.360 EXP/	3.375	90.00		23.00 PRODUCTIO N	

3 Plots

3.1 Wellbore Schematic

August 16 2011 at 1:02 mm